



bluesign

bluesign  
Criteria  
for processing  
articles and B2B  
consumer products

Version 1.0 | 2026-09

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# 1 Revision history

| Document title                                                      | Version no. | Published      | Remarks                                           |
|---------------------------------------------------------------------|-------------|----------------|---------------------------------------------------|
| bluesign Criteria for processing articles and B2B consumer products | v1.0        | September 2026 | See <a href="#">Changelog [6]</a> for key changes |

## 1.1 Changelog

This changelog lists the key changes made from **the bluesign Criteria documents listed in row 1 of the table below** to the **revision draft of bluesign Criteria Version 1.0 (published 2026-09)**.

| Key changes                                                               | Location                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Consolidation of all requirements and recommendations from the documents  | <ol style="list-style-type: none"> <li>1. bluesign® SYSTEM v3.0 (2020-03)</li> <li>2. bluesign® CRITERIA for production sites v3.0 (2020-03)               <ol style="list-style-type: none"> <li>a. ANNEX: Exclusion criteria, v1.1 (2020-03)</li> <li>b. ANNEX: Textile Manufacturer v3.0 (2020-03)</li> <li>c. ANNEX: VOC Management v1.1 (2022-05)</li> <li>d. ANNEX: Rating of production sites v2.0 (2020-03)</li> <li>e. ANNEX: Rating matrix - Manufacturer v1.0 (2020-03)</li> <li>f. ANNEX: Down and feathers processing v3.0 (2020-03)</li> <li>g. ANNEX: Fiber manufacturing v1.0 (2020-03)</li> <li>h. ANNEX: Leather processing v2.0 (2020-03)</li> <li>i. ANNEX: Surface treatment of metals and plastics/non-textile substrates v3.0 (2020-03)</li> </ol> </li> <li>3. bluesign® CRITERIA for converters v3.0 (2020-03)</li> <li>4. and from related guidelines and guidance sheets</li> </ol>                                                                                                                                 |
| Comprehensive structural shift, resulting in restart in version numbering | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Amended requirements and recommendations                                  | <p>In order to provide greater clarity and facilitate evaluation, the wording of requirements and recommendations have been amended within:</p> <ul style="list-style-type: none"> <li>• Topic: Management system               <ul style="list-style-type: none"> <li>• Quality management system</li> <li>• OHS management system</li> </ul> </li> <li>• Topic: Product stewardship               <ul style="list-style-type: none"> <li>• Input stream management</li> </ul> </li> <li>• Topic: Environment               <ul style="list-style-type: none"> <li>• Wastewater</li> <li>• Air emissions</li> <li>• Waste, soil and groundwater management</li> </ul> </li> <li>• Topic: Occupational health and safety               <ul style="list-style-type: none"> <li>• Occupational health management and training</li> <li>• Safety management</li> </ul> </li> <li>• Topic: Emergency preparedness               <ul style="list-style-type: none"> <li>• Fire safety, evacuation and major accident hazards</li> </ul> </li> </ul> |
| New requirements and recommendations                                      | <p>In order to align with regulations, industry norms and consumer expectations, requirements and recommendations have been added in the following topics:</p> <ul style="list-style-type: none"> <li>• Topic: Sustainability management (NEW topic)               <ul style="list-style-type: none"> <li>• General</li> <li>• Ecodesign</li> <li>• Social responsibility</li> </ul> </li> <li>• Topic: Product stewardship               <ul style="list-style-type: none"> <li>• Input stream management</li> </ul> </li> <li>• Topic: Environment               <ul style="list-style-type: none"> <li>• Wastewater</li> <li>• Air emissions</li> </ul> </li> <li>• Topic: Supply chain assurance (NEW topic)</li> <li>• Process: Leather manufacturing</li> </ul>                                                                                                                                                                                                                                                                          |

## 2 Scope and description of requirements

### 2.1 Scope

The *bluesign Criteria* is a set of requirements for companies which are valid for *bluesign System Partner* companies.

In-scope companies are outlined in Table 1, "In-scope company types for bluesign Criteria" [7]:

**Table 1. In-scope company types for bluesign Criteria**

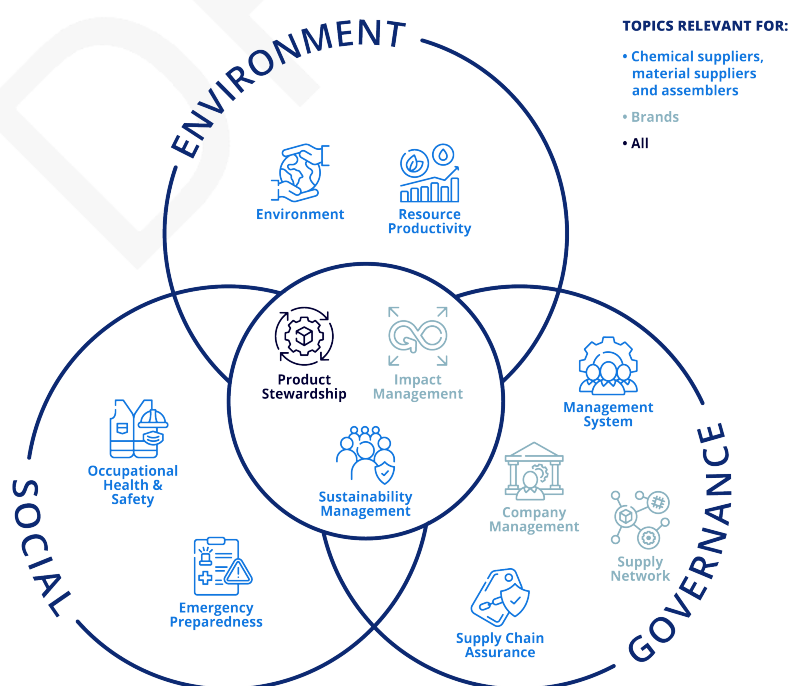
| bluesign Criteria document                                          | In-scope company types                                                                                                                     |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| bluesign Criteria for processing chemical products                  | <i>chemical suppliers</i>                                                                                                                  |
|                                                                     | <i>material suppliers</i>                                                                                                                  |
| bluesign Criteria for processing articles and B2B consumer products | <i>assemblers</i> ("cut-and-sew" factories without <i>wet processing</i> , facilities manufacturing consumer products with wet processing) |
| bluesign Criteria for processing B2C consumer products              | <i>brands</i>                                                                                                                              |

Out-of-scope companies are:

- *traders*
- *distributors*
- *embellishers*
- *agents*

The requirements are grouped into topics that holistically cover the scope of Environment, Social and Governance (ESG), as depicted in the infographic below:

**Figure 1. bluesign Criteria topics mapped to ESG**



Certain sets of requirements and recommendations apply depending on the process(es) a company engages in. These processes are determined during the onboarding process before an initial assessment and documented in order to allow the right set of requirements to be pre-selected for assessment. Based on the specific context of the site and scope of evaluation, the assessor has the authority to determine which requirements and recommendations are applicable or not during the assessment.

An overview of the processes relevant for each company type is provided in the table below:

**Table 2. Process to company type matrix**

| Process type       | Process name                                                 | Chemical supplier | Material supplier | Assembler | Brand |
|--------------------|--------------------------------------------------------------|-------------------|-------------------|-----------|-------|
| Business process   | <i>Product stewardship</i> only                              | X                 |                   |           |       |
|                    | <i>Rebranding</i> of <i>registered</i> chemical products     | X                 |                   |           |       |
|                    | Rebranding of non-registered chemical products               | X                 |                   |           |       |
|                    | <i>Toll manufacturing</i>                                    | X                 |                   |           |       |
|                    | <i>Converting</i>                                            |                   | X                 | X         | X     |
|                    | <i>Subcontracting</i>                                        |                   | X                 | X         | X     |
|                    | <i>Commission manufacturing</i>                              |                   | X                 | X         |       |
|                    | Due diligence                                                |                   |                   |           | X     |
|                    | Product certification                                        |                   |                   |           | X     |
|                    | Chemical manufacturing with product stewardship              | X                 |                   |           |       |
| Production process | Chemical manufacturing without product stewardship           | X                 |                   |           |       |
|                    | Chemical recycling                                           | X                 |                   |           |       |
|                    | <i>Fiber manufacturing</i>                                   |                   | X                 |           |       |
|                    | Yarn manufacturing                                           |                   | X                 |           |       |
|                    | Textile manufacturing                                        |                   | X                 |           |       |
|                    | Consumer product manufacturing (with <i>wet processing</i> ) |                   | X                 | X         |       |
|                    | Consumer product assembling (without wet processing)         |                   |                   | X         |       |
|                    | Plastic part manufacturing                                   |                   | X                 |           |       |
|                    | Fabricated metal part manufacturing                          |                   | X                 |           |       |
|                    | <i>Down and feather manufacturing</i>                        |                   | X                 |           |       |
|                    | Leather manufacturing                                        |                   | X                 |           |       |
|                    | Footwear manufacturing                                       |                   | X                 |           |       |

### 2.1.1 Transition period

The **bluesign Criteria for processing articles and B2B consumer products (bluesign Criteria)** Version 1.0 is planned to be officially released on 1 December 2026 and is effective for all contractual partners in one year beginning 1 December 2027. The transition period starts on the day of release and lasts one year. All assessments conducted on or after 1 December 2027 shall be conducted according to bluesign Criteria Version 1.0.

An exception to the 1-year transition period is granted to assemblers. In this case, the transition period is 3 years, meaning bluesign Criteria V1.0 is valid from 1 December 2029.

### 2.1.2 Product registration and certification

Upon achieving Criteria conformance, these companies may:

- *register their products*, the conditions for which are available in a separate document titled "bluesign Criteria for bluepass Products"

- *certify* their consumer-facing *registered* products, the certification requirements for which are available in a separate document titled "bluesign Scheme for consumer-facing bluepass Products"

### 2.1.2.1 Product registration

Products eligible for *product registration* are:

- *chemical products*
  - for industrial use in the textile, accessories and leather industry
    - for direct use in the textile manufacturing process
    - chemical intermediates
  - for end-consumer use in textile care
- *articles*
  - textile articles for industrial use at all processing levels (e.g. man-made fibres, yarns, woven fabrics)
  - finished leather articles for industrial use
  - accessories for industrial use (e.g. zippers, buttons)
- *B2B* and *B2C consumer products* in the following categories:
  - *apparel*, including denim apparel
  - *home textiles*
  - *equipment*
  - *footwear*

### 2.1.2.2 Product certification

Products eligible for product certification are:

- *chemical products* that will be consumer-facing, e.g. via labelling on consumer product or for end-consumer use
  - for industrial use in the textile, accessories and leather industry
    - for direct use in the textile manufacturing process
  - for end-consumer use in textile care
- *articles* that will be consumer-facing, e.g. via labelling on consumer product or for end-consumer use
  - textile articles for industrial use at all processing levels (e.g. man-made fibres, yarns, woven fabrics)
  - finished leather articles for industrial use
  - accessories for industrial use (e.g. zippers, buttons)
  - textile articles and accessories for end-consumer use (e.g. repair kits)
- *B2B* and *B2C consumer products* in the following categories:
  - *apparel*, including denim apparel
  - *home textiles*
  - *equipment*
  - *footwear*

Where a product's eligibility is unclear from the categories above, bluesign shall determine scope inclusion based on documented assessment criteria, including the product's material composition, intended end-use, and alignment with bluesign's published certification criteria.

## 2.2 Description of company requirements

Company requirements and recommendations in bluesign Criteria are categorised as follows:

**Table 3. Categories of requirements and recommendations for companies in bluesign Criteria**

| Level          | Description                                                                                                                                                                                            |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Requirement    | These requirements are to be fulfilled without deviation by a company before they can join the <i>bluesign System</i> as a <i>System Partner</i> and begin <i>product registration</i> .               |
| Recommendation | These leadership best practices are suggested possible courses of action and help the organisation achieve improvement over time. They also serve as testing ground for potential future requirements. |

Not all topics have requirements and recommendations.

### 2.2.1 How to read this document

The following verbal forms are used to indicate requirements, recommendations, permissions, or possibilities in this document.

- "shall", "required" or "necessary" indicates a mandatory requirement
- "should", "recommend" or "ought" indicates a recommendation
- "may" indicates a permission
- "can" indicates a possibility



#### IMPORTANT:

Separate *Technical Guidance* documents may contain the verbal forms "shall", "required", "necessary" or other expressions conveying requirements. Such provisions in separate documents are not to be regarded as bluesign Criteria requirements. Only the requirements expressly stated in this bluesign Criteria document apply.

## 3 Requirements and recommendations for processing articles

### 3.1 Sustainability management

#### 3.1.1 General

##### 3.1.1.1 For material suppliers

| No.     | Level          | Statement                                                                                                                                     |
|---------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement    | Company shall have a publicly available sustainability strategy.                                                                              |
| PENDING | Recommendation | A <a href="#">materiality assessment</a> aligned with an internationally recognised standard (e.g. ESRS, GRI) should be conducted.            |
| PENDING | Recommendation | A sustainability report aligned with an internationally recognised standard (e.g. ESRS, GRI) should be published for the last financial year. |
| PENDING | Recommendation | The company's sustainability report should be externally assured.                                                                             |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | Company shall request environmental footprint data (e.g. product carbon footprint, water footprint) for purchased chemicals and materials. If received, this information shall be recorded.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| PENDING | Requirement | <p>Company shall report to bluesign annually on the following impact figures where applicable:</p> <ol style="list-style-type: none"> <li>Environmental data points               <ol style="list-style-type: none"> <li>Production volume</li> <li>Yearly energy types, sources and consumption, including <a href="#">EACs</a> and Power Purchase Agreements</li> <li>Freshwater sources and consumption, recycled water consumption, discharged water destination and quantity</li> <li>Volume of generated wastewater</li> <li>Chemical consumption based on <a href="#">Chemical Inventory List</a> (CIL)</li> <li><a href="#">CMR</a> solvent consumption</li> <li>Total solvent consumption</li> <li>Fugitive VOC emissions (%)</li> <li>Refrigerants</li> <li>Waste generation, types, amount and disposal routes</li> <li>Total amount of waste generation, types and disposal routes</li> </ol> </li> <li>Social metrics               <ol style="list-style-type: none"> <li>No. of incidents</li> <li>No of fatalities</li> <li>No of illness cases</li> <li>No of working hours during the reporting period</li> <li>No of workers in the facility at year end</li> </ol> </li> </ol> |

#### 3.1.2 Ecodesign

##### 3.1.2.1 For material suppliers

| No.     | Level          | Statement                                                                                                                                             |
|---------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Recommendation | Company should have testing data on article durability (regarding 'list test parameters') for at least 10 % of their registered articles (by number). |
| PENDING | Recommendation | Company should design at least 10 % of their fabrics towards recyclability.                                                                           |

| No.     | Level          | Statement                                                                                                                                     |
|---------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Recommendation | Company should have a minimum of 5 % recycled content measured as fraction of the overall production volume.                                  |
| PENDING | Recommendation | Company should have testing data on microparticle shedding for at least 10 % of their registered man-made fiber textile articles (by number). |

### 3.1.3 Social responsibility

#### 3.1.3.1 For material suppliers

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 182     | Requirement    | The company shall have a human rights policy aligned with internationally recognized standards, with the eight <i>ILO Core Conventions</i> as a minimum.                                                                                                                                                                                                                                                                                                                                                                                                                                |
| PENDING | Requirement    | Where a <i>bluesign Company Assessment</i> identifies indications that the ILO Core Conventions may not be fully met, the company shall provide a third-party social audit report based on an internationally recognized standard, including the following elements: <ul style="list-style-type: none"> <li>• Less than three years old</li> <li>• Source of information includes at the minimum document checks, management and worker interviews, and on-site assessments</li> <li>• Information and conclusions are provided on every topic part of the assessed standard</li> </ul> |
| PENDING | Recommendation | The company should present a third-party social audit report based on internationally recognized standards that includes the following elements: <ul style="list-style-type: none"> <li>• Less than three years old</li> <li>• Source of information includes at the minimum document checks, management and worker interviews, and on-site assessments</li> <li>• Information and conclusions are provided on every topic part of the assessed standard</li> </ul>                                                                                                                     |
| PENDING | Recommendation | A corrective action plan from the third-party social audit report should be in process of being implemented                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## 3.2 Management system

### 3.2.1 Legal compliance management

#### 3.2.1.1 For material suppliers

| No. | Level       | Statement                                                                                                                                                                                                                                                                                                 |
|-----|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 151 | Requirement | All relevant licenses/permits related to EH&S shall be available.<br>An overview on licenses/permits shall be available, including the following as applicable:                                                                                                                                           |
| 154 | Requirement | <ul style="list-style-type: none"> <li>• Overview on licenses/permits with main contents (subject, expiry date, responsibilities)</li> <li>• Overview of applicable limit values based on legal national and local requirements, e.g. for wastewater, off-gas, workplace atmosphere with units</li> </ul> |
| 156 | Requirement | A process to monitor the validity of relevant licenses/permits shall be in place.                                                                                                                                                                                                                         |
| 155 | Requirement | Relevant information on legal requirements shall be available for the responsible persons.                                                                                                                                                                                                                |
| 153 | Requirement | The company shall be aware of product safety regulations for the finished products in the related markets.                                                                                                                                                                                                |
| 157 | Requirement | A written procedure to track changes in product safety regulations for finished products in the relevant markets shall be in place, including clear responsibilities assignment.                                                                                                                          |
| 158 | Requirement | A process to track changes in local regulations shall be in place.                                                                                                                                                                                                                                        |

### 3.2.1.1.1 For the process: Leather manufacturing

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | <p>For leather manufacturers, the following shall be adhered to:</p> <ol style="list-style-type: none"> <li>1. Company shall be assessed by a Leather Working Group (LWG) approved auditor using the relevant LWG Audit Standard, and receive a Silver rating at the minimum.</li> <li>2. Company shall fulfil all <a href="#">bluesign Criteria requirements</a> specified for the process "Leather manufacturing".</li> </ol> |

## 3.2.2 Quality management system

### 3.2.2.1 General

#### 3.2.2.1.1 For material suppliers

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 221     | Requirement    | <p>A quality management system (QMS) (preferably following ISO 9001) shall be in place and include the following elements:</p> <ul style="list-style-type: none"> <li>• Quality policy</li> <li>• Quality objectives</li> <li>• Written documentation with the below core elements: <ol style="list-style-type: none"> <li>1. Leadership and Commitment: Explains how top management demonstrates leadership and commitment to the QMS</li> <li>2. Roles and Responsibilities: Clearly defines the roles and authorities of all personnel involved in the QMS</li> <li>3. Documentation: Lists for all required QMS documents, such as policies, procedures, work instructions, forms and records.</li> </ol> </li> <li>• where applicable, <a href="#">SOPs</a> for: <ol style="list-style-type: none"> <li>1. managing competence and training</li> <li>2. document and record control</li> <li>3. production process control</li> <li>4. purchasing and supplier evaluation</li> <li>5. traceability</li> <li>6. inspection and testing of raw materials and finished products</li> <li>7. nonconforming product control</li> <li>8. complaints management</li> <li>9. management review</li> <li>10. internal audit</li> </ol> </li> </ul> <p>All documents shall be updated according to the frequency predefined by the company.</p> |
| 222     | Requirement    | The company's quality policy shall be established and publicly available (e.g. on the website, or a printed copy at the reception).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 224     | Requirement    | The quality management approach shall be visible in company (awareness of <a href="#">SOPs</a> and objectives, relevant quality management documents readily available near the relevant workplaces).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 225     | Requirement    | An improvement program shall be implemented based on measurable objectives to continuously improve the quality of products and services.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| PENDING | Requirement    | Employees shall receive a general onboarding training for quality management.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| PENDING | Requirement    | Employees shall receive general refresher trainings for quality management at regular intervals during their employment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 226     | Requirement    | Internal and/or external audits regarding quality management shall be conducted and a follow-up procedure for corrective measures of non-conformities shall be in place and well documented. Evidences for closure of corrective actions shall be available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 229     | Recommendation | Quality management system should be certified according to ISO 9001 or equivalent by an accredited certification body. Certification should be kept for more than 3 years                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| PENDING | Requirement    | An annual management review of achieved performance against the defined quality targets shall be conducted and follow-up action shall be defined.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

### 3.2.2.1.1.1 For the process: Converting

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | <p>A quality management system (QMS) (preferably following ISO 9001) shall be in place and include the following elements:</p> <ul style="list-style-type: none"> <li>Quality policy</li> <li>Quality objectives</li> <li>Written documentation with the below core elements: <ol style="list-style-type: none"> <li>Leadership and Commitment: Explains how top management demonstrates leadership and commitment to the QMS</li> <li>Roles and Responsibilities: Clearly defines the roles and authorities of all personnel involved in the QMS</li> <li>Documentation: Lists for all required QMS documents, such as policies, procedures, work instructions, forms and records.</li> </ol> </li> <li>where applicable, <i>SOPs</i> for: <ol style="list-style-type: none"> <li>bluesign order management</li> <li>quality control</li> <li>nonconforming product control</li> <li>complaints management</li> </ol> </li> </ul> <p>All documents shall be updated according to the frequency predefined by the company.</p> |

### 3.2.2.2 Responsible persons

#### 3.2.2.2.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                              |
|-----|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 203 | Requirement    | An adequate and complete organization chart shall be available. (See: <i>Technical Guidance</i> on Organizational chart)                                                                                                                               |
| 205 | Requirement    | A responsible person for quality management shall be defined with documented skills adequate to the position (e.g. academic degree in chemical/textile engineering, several years of experience as a quality manager, ISO 9001 auditor qualification). |
| 206 | Requirement    | Responsibilities/tasks for quality management shall be clearly defined in writing.                                                                                                                                                                     |
| 207 | Requirement    | The function for quality management shall be directly accountable to senior management.                                                                                                                                                                |
| 209 | Recommendation | The person responsible for quality management should have extended expert knowledge and skills (e.g. experience in industry 5+ years ; specific education for relevant field; member of external expert group).                                        |

### 3.2.2.3 Process management

#### 3.2.2.3.1 For material suppliers

| No. | Level          | Statement                                                                                                       |
|-----|----------------|-----------------------------------------------------------------------------------------------------------------|
| 241 | Requirement    | Basic recipe and <i>EHS</i> information shall be available at the relevant production units.                    |
| 242 | Requirement    | <i>TDS</i> shall be available at the company and related process information shall be included in recipes.      |
| 243 | Requirement    | Route cards and process flowcharts shall be available and basic quality control shall be in place.              |
| 244 | Requirement    | Actual vessel/machine settings and dosings shall be recorded (including corrections) for all production batches |
| 245 | Requirement    | Scales, measuring and dosing units shall be regularly calibrated.                                               |
| 246 | Recommendation | Recipes and and route cards should be regularly reviewed to optimize the process.                               |
| 248 | Recommendation | Automated process control should be available.                                                                  |

| No. | Level       | Statement                                                                                                                          |
|-----|-------------|------------------------------------------------------------------------------------------------------------------------------------|
| 281 | Requirement | Process-related quality testing (physical and performance) shall be conducted routinely and ad hoc in case of customer complaints. |

| No. | Level          | Statement                                                                                                                            |
|-----|----------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 284 | Requirement    | Quality-related <i>KPIs</i> including restricted substances shall be defined (e.g. rate of customer complaints, failure rate, etc.). |
| 285 | Recommendation | Improvements on quality-related KPIs should be achieved.                                                                             |

### 3.2.2.4 Traceability

#### 3.2.2.4.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                |
|-----|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 262 | Requirement    | Traceability of manufactured and/or converted finished product(s) to all inputs on a lot and/or purchase order basis with exception of bulk chemicals shall be possible. |
| 274 | Recommendation | Traceability of all inputs to manufactured and/or converted finished product(s) should be supported by data management systems (e.g. bar code and <i>ERP</i> system)     |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                               |
|---------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | The company shall maintain a list of authorised traders and/or distributors, and a process to manage the list.                                                                                                                                                                                                                          |
| PENDING | Requirement | The company shall keep retain samples with product names, lot numbers and GHS pictogram (if needed for chemicals) for raw materials, intermediates and finished products. The necessary retention time depends on the product (shelf life, legal aspects, requirements of downstream supply chain), but shall not be less than 2 years. |

### 3.2.3 Environmental management system

#### 3.2.3.1 General

##### 3.2.3.1.1 For material suppliers

| No. | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 301 | Requirement | <p>An environmental management system (preferably following ISO 14001) shall be in place and include the following elements:</p> <ul style="list-style-type: none"> <li>• environmental management policy</li> <li>• environmental objectives</li> <li>• written documentation with the following elements: <ol style="list-style-type: none"> <li>1. Leadership and Commitment: Explains how top management demonstrates leadership and commitment to the EMS</li> <li>2. Roles and Responsibilities: Clearly defines the roles and authorities of all personnel involved in the EMS</li> <li>3. Documentation: Lists for all required EMS documents, such as policies, procedures, work instructions, and forms</li> </ol> </li> <li>• where applicable, <i>SOPs</i> for <ol style="list-style-type: none"> <li>1. environmental aspects and impact assessment</li> <li>2. legal and compliance obligations</li> <li>3. operational control (e.g. wastewater, waste management, air emissions, chemical management)</li> <li>4. emergency preparedness and response</li> <li>5. competence and training</li> </ol> </li> </ul> <p>All documents shall be updated according to the frequency predefined by the company.</p> |
| 302 | Requirement | <p>The company's environmental management policy shall be established and publicly available (e.g. on the website, or a printed copy at the reception). The policy shall include a commitment to the following elements:</p> <ol style="list-style-type: none"> <li>1. an increase in the usage of more sustainable chemicals (e.g. chemicals with recycled and/org renewable content, biodegradable chemicals, chemicals with reduced hazard profile, chemicals with verified PCF, chemicals with low/no VOC content, bluepass Chemical Products);</li> <li>2. reduced emissions to water and air, reduced waste generation;</li> <li>3. responsible resource consumption (freshwater, energy, chemicals);</li> <li>4. reduction of the company's <i>GHG footprint</i></li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| No.     | Level          | Statement                                                                                                                                                                                                                    |
|---------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 304     | Requirement    | The environmental management approach shall be visible in company (awareness of SOPs and objectives, relevant environmental management documents readily available near the relevant workplaces).                            |
| 305     | Requirement    | Measurable environmental objectives and an adequate improvement program (incl. measures, resources, responsibilities) shall be defined.                                                                                      |
| 306     | Requirement    | Internal and/or external audits regarding environmental aspects shall be conducted. The audits shall be documented including implemented corrections and/or corrective actions and a follow-up of remaining nonconformities. |
| 309     | Recommendation | A valid third-party environmental management system certification awarded by an accredited certification body should be available.                                                                                           |
| 311     | Recommendation | A valid third-party energy management system certification awarded by an accredited certification body should be available.                                                                                                  |
| PENDING | Requirement    | An annual management review of achieved performance against the defined environmental management targets shall be conducted and follow-up action shall be defined.                                                           |

| No.     | Level       | Statement                                                                                  |
|---------|-------------|--------------------------------------------------------------------------------------------|
| PENDING | Requirement | Employees shall receive a general onboarding training for environmental management.        |
| PENDING | Requirement | Employees shall receive general refresher trainings for environmental management annually. |

### 3.2.3.2 Responsible persons

#### 3.2.3.2.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                           |
|-----|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 292 | Requirement    | A responsible person for environmental management shall be defined with documented skills adequate to the position (e.g. academic degree in chemical/textile engineering, several years of experience as a environmental manager, ISO 14001 auditor qualification). |
| 293 | Requirement    | Responsibilities/tasks for environmental management shall be clearly defined in writing.                                                                                                                                                                            |
| 294 | Requirement    | The function for environmental management shall be directly accountable to senior management with adequate authority.                                                                                                                                               |
| 296 | Recommendation | The person responsible for environmental management should have extended expert knowledge and skills (e.g. experience in industry 5+ years ; specific education for relevant field; member of external expert group).                                               |

### 3.2.3.3 Risk assessments

#### 3.2.3.3.1 For material suppliers

| No.     | Level          | Statement                                                                                                                                                                                     |
|---------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement    | Environmental risk assessments shall be available for all areas and operations of the production site considering impact areas such as water pollution, air pollution and soil contamination. |
| PENDING | Recommendation | Employees should be involved during environmental risk assessments.                                                                                                                           |
| PENDING | Recommendation | Environmental risk assessments should be part of yearly management review.                                                                                                                    |

## 3.2.4 Occupational health and safety management system

### 3.2.4.1 General

#### 3.2.4.1.1 For material suppliers

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 331     | Requirement    | <p>An <i>OHS</i> management system (preferably following ISO 45001) shall be in place and included the following elements:</p> <ul style="list-style-type: none"> <li>• OHS management policy</li> <li>• OHS management objectives</li> <li>• Written documentation with the following elements:               <ol style="list-style-type: none"> <li>1. Leadership and Commitment: Explains how top management demonstrates leadership and commitment to the OHS</li> <li>2. Roles and Responsibilities: Clearly defines the roles and authorities of all personnel involved in the OHS</li> <li>3. Documentation: Lists for all required OHS documents, such as policies, procedures, work instructions, and forms</li> </ol> </li> <li>• where applicable, SOPs for               <ol style="list-style-type: none"> <li>1. emergency preparedness</li> <li>2. handling of hazardous materials</li> <li>3. OHS risk assessment</li> <li>4. OHS training</li> </ol> </li> </ul> <p>All documents shall be updated according to the frequency predefined by the company.</p> |
| 334     | Requirement    | The OHS approach shall be visible in company (awareness of SOPs and objectives, relevant OHS management documents readily available near the relevant workplaces).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 335     | Requirement    | Measurable OHS objectives and an adequate improvement program (incl. measures, resources, responsibilities) shall be defined.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 336     | Requirement    | Internal and/or external audits regarding OHS aspects shall be conducted with a documented follow-up of non-conformities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 339     | Recommendation | A valid third-party OHS management system certification awarded by an accredited certification body should be available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| PENDING | Requirement    | An annual management review of achieved performance against the defined OHS targets shall be conducted and follow-up action shall be defined.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| No. | Level       | Statement                                                                                                            |
|-----|-------------|----------------------------------------------------------------------------------------------------------------------|
| 342 | Requirement | Employees shall receive a general onboarding training for OHS management.                                            |
| 343 | Requirement | Employees shall receive general refresher trainings for OHS management at regular intervals during their employment. |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | The company shall establish and maintain confidential incident reporting and speak-up mechanisms that enable all workers and relevant external parties to raise health, safety, and labour-related concerns (including near misses) without fear of retaliation.                                                                                                                                                                                                                                                   |
| PENDING | Requirement | Reported cases from incident reporting and speak-up mechanisms shall be documented, assessed, and followed up with appropriate corrective and preventive actions as part of the OHS management system                                                                                                                                                                                                                                                                                                              |
| PENDING | Requirement | <p>The incident reporting and speak-up mechanisms shall be:</p> <ol style="list-style-type: none"> <li>1. provided in the language(s) that workers speak fluently, and</li> <li>2. accessible through channels that workers can reasonably use in their daily work context.</li> </ol> <p>Purely digital or online tools are not sufficient where workers have limited or no access to the internet, and alternative options (such as onsite forms, hotlines, or in-person reporting) shall be made available.</p> |

### 3.2.4.2 Responsible persons

#### 3.2.4.2.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                                   |
|-----|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 322 | Requirement    | A responsible person for occupational health and safety management shall be defined with documented skills adequate to the position (e.g. academic degree in chemical/textile engineering, several years of experience as an OHS manager, ISO 45001 auditor qualification). |
| 323 | Requirement    | Responsibilities/tasks for occupational health and safety management shall be clearly defined in writing.                                                                                                                                                                   |
| 324 | Requirement    | The function for occupational health and safety management shall be directly accountable to senior management with adequate authority.                                                                                                                                      |
| 326 | Recommendation | The person responsible for occupational health and safety management should have extended expert knowledge and skills (e.g. experience in industry 5+ years ; specific education for relevant field; member of external expert group).                                      |

### 3.2.4.3 Risk assessments

#### 3.2.4.3.1 For material suppliers

| No.  | Level          | Statement                                                                                                                                                           |
|------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1107 | Requirement    | <i>OHS</i> risk assessments shall be available for all areas and operations of the production site, considering natural, technical/mechanical and chemical hazards. |
| 1111 | Recommendation | OHS risk assessments should be part of yearly management review.                                                                                                    |
| 1112 | Recommendation | Employees should be involved during OHS risk assessments                                                                                                            |

### 3.2.5 Housekeeping and maintenance

#### 3.2.5.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                           |
|-----|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 371 | Requirement    | The level of housekeeping of facilities concerning tidiness and cleanliness shall assure a safe work environment.                                                                                                   |
| 372 | Requirement    | Responsibilities for tidiness and cleanliness for all facilities shall be defined.                                                                                                                                  |
| 373 | Requirement    | Responsibilities for maintenance for all facilities shall be defined.                                                                                                                                               |
| 375 | Requirement    | Good housekeeping practice shall be part of employees' onboarding and refresher training.                                                                                                                           |
| 376 | Requirement    | Tidiness and cleanliness (housekeeping) shall be subject to regular checks.                                                                                                                                         |
| 377 | Requirement    | The level of maintenance of facilities and equipment shall allow for a safe work environment.                                                                                                                       |
| 378 | Requirement    | Maintenance plans for facilities and equipment shall include routine checks and be defined in accordance with relevant machine safety standards, such as the ISO 11111 series (Parts 1 to 7) for textile machinery. |
| 379 | Recommendation | The level of housekeeping should be at an exceptional level and all housekeeping activities should be systematically recorded.                                                                                      |
| 380 | Recommendation | The level of maintenance should be at an exceptional level and all maintenance activities should be systematically recorded.                                                                                        |
| 381 | Recommendation | Maintenance and inspection plans should be subject to internal reviews at least annually.                                                                                                                           |
| 382 | Recommendation | Special maintenance techniques and equipment should be used to detect decreasing efficiency and wear and tear.                                                                                                      |

| No.  | Level       | Statement                                                                                      |
|------|-------------|------------------------------------------------------------------------------------------------|
| 1119 | Requirement | Checks of buildings and structures shall be regularly conducted.                               |
| 1120 | Requirement | Buildings and structures shall be free of structural damage.                                   |
| 1169 | Requirement | The risk of Legionella growth in aqueous cooling systems shall be under control (if relevant). |

## 3.3 Product stewardship

### 3.3.1 Input stream management

#### 3.3.1.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                |
|-----|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 408 | Recommendation | Company should substitute purchased materials with more sustainable alternatives, e.g. certified organic cotton, certified organic wool, certified recycled materials, renewable raw materials, materials with verified product carbon footprint data.<br><br>A minimum of 5 % per annum should be targeted and achieved.                                                |
| 409 | Recommendation | Company should substitute purchased chemicals with more sustainable alternatives, e.g. chemicals with recycled and/org renewable content, biodegradable chemicals, chemicals with reduced hazard profile, chemicals with verified PCF, chemicals with low/no VOC content, bluesign Chemical Products.<br><br>A minimum of 5 % per annum should be targeted and achieved. |

| No. | Level       | Statement                                                                                                                                                                                                      |
|-----|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 410 | Requirement | Appropriate <a href="#">SOPs</a> and responsible persons for purchasing of all inputs (e.g. textile raw materials, chemical products, etc.) necessary to manufacture and/or convert products shall be defined. |
| 411 | Requirement | Measures shall be installed to check and record delivered all inputs (e.g. textile raw materials, chemical products, etc.) necessary to manufacture and/or convert products for type and quantity.             |
| 413 | Requirement | For material input from animal source, the <a href="#">Five Freedoms</a> of animal welfare should be verified by an independent third-party certification.                                                     |

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                  |
|-----|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 522 | Requirement    | Up-to-date, <a href="#">GHS</a> -format SDS shall be available for all chemical products used and stored.                                                                                                                                                                                                  |
| 526 | Requirement    | An evaluation regarding environmental release and occupational health and safety for all chemicals shall be performed before purchasing. For non- <a href="#">registered</a> chemicals consumer safety risk shall be assessed.                                                                             |
| 527 | Requirement    | Measurable objectives for chemicals change management (e.g. increase share of certified chemicals, reduction/substitution of hazardous chemicals, switching to water-based systems or low-VOC/high-solid pastes, solvents with lower global warming potential and lower ozone depletion) shall be defined. |
| 528 | Recommendation | Chemical Change Management ( <a href="#">CCM</a> ) target should be reached as agreed in the last chemical change management meeting with bluesign.                                                                                                                                                        |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 530     | Requirement | Information on chemicals used on-site shall be collected and entered into the bluesign <a href="#">Chemical Inventory List</a> (CIL) to allow a <a href="#">chemical assessment</a> of the CIL (See: Technical Guidance "Chemical assessment of CIL").                                                                                                                                                                                                                                                                   |
| PENDING | Requirement | Information on materials used for <a href="#">registered</a> articles shall be collected and entered into the <a href="#">Material Inventory List</a> (MIL) to allow a <a href="#">chemical assessment</a> of the MIL (See: Technical Guidance "Chemical assessment of MIL").                                                                                                                                                                                                                                            |
| 545     | Requirement | For all chemicals present on-site except lab chemicals:<br><br><ol style="list-style-type: none"> <li>CIL shall be updated annually, including information on consumption and stock</li> <li>Updated and <a href="#">GHS</a>-compliant <a href="#">SDS</a> for non-<a href="#">registered</a> chemical products shall be uploaded to the CIL</li> <li>All <a href="#">black-rated</a> and/or <a href="#">banned</a> chemicals of a production site are phased out</li> </ol>                                             |
| PENDING | Requirement | In case recycled material inputs are used for registered articles, the following actions shall be taken:<br><br><ul style="list-style-type: none"> <li>Collect certificates if available</li> <li>Get information on the sources of recycled material such as post-production recycling (PPR), post-consumer recycling (PCR), description of origin(s)</li> <li>Get information on the type of recycling process applied for the material such as chemical recycling, mechanical recycling, thermal recycling</li> </ul> |

| No.     | Level          | Statement                                                                                                                                                                                 |
|---------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement    | Company shall assure that for <i>registered</i> articles only <i>registered</i> , <i>accepted</i> and/or <i>tolerated</i> chemical products are used. Traceability records shall be kept. |
| PENDING | Recommendation | Company should have a First-In, First-Out (FIFO) system to reduce the risk of expired stock.                                                                                              |

## PFAS management

| No.     | Level          | Statement                                                                                                                                                                                                                                                                          |
|---------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement    | If PFAS are still used at the facility, the company shall maintain a register of equipment where PFAS chemicals are processed.                                                                                                                                                     |
| PENDING | Requirement    | If PFAS chemicals and materials are still in use at the site, strict segregation shall be implemented to prevent cross-contamination. Equipment shall be dedicated for non-PFAS products. PFAS testing shall be done after any incident or change that may compromise segregation. |
| PENDING | Requirement    | Material supplier shall have a documented and management-approved PFAS strategy with the aim of reduction or phase-out, or PFAS is already phased-out.                                                                                                                             |
| PENDING | Recommendation | Material supplier should have completed the PFAS phase-out i.e. no PFAS containing chemicals and materials are stored and handled on-site.                                                                                                                                         |

## Chemicals management

| No.     | Level       | Statement                                                                                                                                                                                                                         |
|---------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | Employees in charge of chemical management shall be adequately qualified (e.g. higher education in chemistry or chemical engineering, or adequate practical chemical education plus relevant work experience).                    |
| PENDING | Requirement | Organizational and technical controls (e.g. segregation of materials and processes, documented cleaning procedures) shall be implemented to prevent cross-contamination of <i>registered</i> articles with restricted substances. |
| PENDING | Requirement | Storage amounts of chemicals in the production area shall not exceed the daily consumption of the respective chemicals.                                                                                                           |

## EDTA, DTPA, phosphonates; DCM

| No. | Level       | Statement                                                                                                                                                                                                              |
|-----|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 549 | Requirement | EDTA, DTPA and phosphonates shall not be used for process water softening purposes.                                                                                                                                    |
| 552 | Requirement | Dichloromethane (DCM) shall not be used in production; when DCM is used in the lab adequate safety measures and hazard training shall be implemented (e.g. work in closed system or provide air supplied respirators). |

### 3.3.1.1.1 For the process: Fibre manufacturing DMF

| No.     | Level       | Statement                                                                                                                                                                          |
|---------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | If the use of <i>DMF</i> is currently unavoidable for <i>registered</i> articles, control of DMF content in coated textile shall be carried out by textile testing on a lot level. |

## Pulp for fibre production

| No.     | Level          | Statement                                                                                                                                                                                                              |
|---------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement    | Pulp for fiber production shall be bleached without the use of elemental chlorine (ECF bleaching).                                                                                                                     |
| PENDING | Recommendation | At least 50% of the pulp should be manufactured in a pulp mill that recovers value from their spent process liquors, e.g. either by generating electricity and steam on-site or by manufacturing chemical co-products. |

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Recommendation | <p>Additionally, the following goals (expressed in emission factors) for the consumption of main inputs should be pursued:</p> <ul style="list-style-type: none"> <li>• Process water: &lt;45 L/kg produced fiber</li> <li>• Energy: &lt;25 GJ/t (6.9 kWh/kg) produced fiber</li> <li>• Carbon disulfide (CS<sub>2</sub>): &lt;100 kg/t produced fiber</li> <li>• Sodium hydroxide (NaOH): &lt;0.6 t/t produced fiber</li> <li>• Sulfuric acid (H<sub>2</sub>SO<sub>4</sub>): &lt;1.0 t/t produced fiber</li> <li>• Zinc (Zn): &lt;10 kg/t produced fiber</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| PENDING | Recommendation | <p>A wood policy should be established, which serves to ensure that pulp fibers/pulp generally originate from legal and sustainable forestry. At a minimum, this wood policy should include the following:</p> <ol style="list-style-type: none"> <li>1. at least 25% of sourced pulp fibers/pulp comes from wood that is certified by independent third-party certification with the label of the Forest Stewardship Council (FSC®) ) or Programme for the Endorsement of Forest Certification (PEFC);</li> <li>2. a statement on the commitment to not using pulp originating from <ol style="list-style-type: none"> <li>a. illegally harvest wood;</li> <li>b. forests of high conservation value, including ancient and endangered forests and endangered species habitats;</li> <li>c. plantations established after 1994 through significant conversion of natural forests or conversion to non-forest use;</li> <li>d. forests or plantations in which genetically modified trees are cultivated;</li> <li>e. sources that are in violation of traditional, community and/or civil rights or in violation of any of the <a href="#">ILO Core Conventions</a></li> </ol> </li> <li>3. be supported by a System Partner's adequate supply chain management to comply with the above-mentioned requirements</li> </ol> |

### 3.3.1.1.2 For the process: Yarn manufacturing

| No. | Level       | Statement                                                                                            |
|-----|-------------|------------------------------------------------------------------------------------------------------|
| 551 | Requirement | Phase-out of dichromate (Cr <sub>2</sub> O <sub>7</sub> <sup>-2</sup> , CrVI) shall be demonstrated. |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | <p>The following shall not be used in the manufacturing of articles due for <a href="#">product registration</a>:</p> <ul style="list-style-type: none"> <li>• For all <ol style="list-style-type: none"> <li>1. Chlorine bleaching (i.e. with NaOCl, Ca(OCl)<sub>2</sub>, NaClO<sub>2</sub>)</li> <li>2. Use of potassium permanganate (PP)</li> <li>3. Pumice stonewashing</li> <li>4. Sandblasting</li> <li>5. Use of powder-based enzymes</li> </ol> </li> <li>• For wool with shrink-proof (antifelt) finishing <ol style="list-style-type: none"> <li>1. Chlorine-based techniques</li> </ol> </li> </ul> |

### 3.3.1.1.3 For the process: Textile manufacturing

| No.     | Level       | Statement                                                                                            |
|---------|-------------|------------------------------------------------------------------------------------------------------|
| 546     | Requirement | Methanol (CH <sub>3</sub> OH) shall not be used in transfer paper printing.                          |
| 551     | Requirement | Phase-out of dichromate (Cr <sub>2</sub> O <sub>7</sub> <sup>-2</sup> , CrVI) shall be demonstrated. |
| PENDING | Requirement | White spirit printing shall not be used.                                                             |

### DMF

| No.     | Level       | Statement                                                                                                                                                                                            |
|---------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | If the use of <a href="#">DMF</a> is currently unavoidable for <a href="#">registered</a> articles, control of DMF content in coated textile shall be carried out by textile testing on a lot level. |

### 3.3.1.1.4 For the process: Consumer product manufacturing

| No. | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 541 | Requirement | Potassium permanganate (KMnO <sub>4</sub> ) shall not be used for <i>registered</i> articles, except for transitional use in denim finishing. A phase-out plan with a defined phase-out date shall be available.                                                                                                                                                                                                                                                                                          |
| 544 | Requirement | Sodium hypochlorite (NaOCl) shall not be used with the exception of denim bleaching and finishing, linen bleaching, freshwater purification, anti-felt treatment of wool, machine cleaning, wastewater decolorization, and use as a stripping agent for color correction.<br><br>For denim bleaching and finishing a phase out-plan for sodium hypochlorite with a defined phase-out date shall be available.<br><br>Sodium hypochlorite shall not be used for <i>registered</i> denim and wool articles. |
| 556 | Requirement | In case sodium hypochlorite (NaOCl) is still in use, subsequent points shall be followed:<br><br>1. Reduce the consumption of bleaching agent<br>2. The occupational exposure limit (OEL) for chlorine is adhered to and relevant measurements are available (See: <a href="#">Occupational exposure limits (OELs) [66]</a> )<br>3. Exact dosing of suitable amounts for the respective application                                                                                                       |
| 546 | Requirement | Methanol (CH <sub>3</sub> OH) shall not be used in transfer paper printing.                                                                                                                                                                                                                                                                                                                                                                                                                               |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | The following shall not be used in the manufacturing of articles due for <i>product registration</i> :<br><br>• For all<br>1. Chlorine bleaching (i.e. with NaOCl, Ca(OCl) <sub>2</sub> , NaClO <sub>2</sub> )<br>2. Use of potassium permanganate (PP)<br>3. Pumice stonewashing<br>4. Sandblasting<br>5. Use of powder-based enzymes<br>• For wool with shrink-proof (antifelt) finishing<br>1. Chlorine-based techniques                                    |
| PENDING | Requirement | For all consumer products, natural rubber shall not be used for consumer products in <i>usage range A</i> .                                                                                                                                                                                                                                                                                                                                                    |
| PENDING | Requirement | If article is a down and feather product, the following shall be fulfilled:<br><br>1. All quality aspects demanded by the customer (e.g. composition, species identification, fill power, filling weight, air permeability, down proof properties, etc.)<br>2. Fat-, oil- and odor-free material with a high level of cleanliness<br>3. The bluesign requirements for down and feather products (See: <a href="#">Requirements for down and feather [50]</a> ) |

### 3.3.1.1.5 For the process: Fabricated metal part manufacturing

| No. | Level          | Statement                                                                                   |
|-----|----------------|---------------------------------------------------------------------------------------------|
| 547 | Requirement    | Chromium (VI) trioxide (CrO <sub>3</sub> ) shall not be used for electrochemical plating.   |
| 548 | Recommendation | Feasibility to replace cyanic plating systems with cyanide free systems should be assessed. |

### 3.3.1.1.6 For the process: Down and feathers manufacturing

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | If article is a down and feather product, the following shall be fulfilled:<br><br>1. All quality aspects demanded by the customer (e.g. composition, species identification, fill power, filling weight, air permeability, down proof properties, etc.)<br>2. Fat-, oil- and odor-free material with a high level of cleanliness<br>3. The bluesign requirements for down and feather products (See: <a href="#">Requirements for down and feather [50]</a> ) |

### 3.3.2 Purchasing and supplier evaluation

#### 3.3.2.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 407 | Requirement    | Purchase specifications for all material inputs (e.g. textile raw materials, membranes, accessory materials) necessary to manufacture <a href="#">registered</a> articles shall be defined. This shall include restricted substances with limits to be kept.                                                                                                                                                                                      |
| 416 | Requirement    | Purchasing specifications for chemicals to assure legal compliance (local legislation, legislations of target markets, e.g. <a href="#">REACH</a> in Europe) of manufactured products shall be defined.                                                                                                                                                                                                                                           |
| 417 | Requirement    | For all non-registered chemical products, the following shall be available: <ul style="list-style-type: none"> <li>• <a href="#">BSBL</a> compliance declaration provided by chemical supplier, updated yearly</li> <li>• <a href="#">GHS</a>-compliant <a href="#">SDS</a></li> <li>• If the chemical product is intended to be used in registered articles, product screening form with detailed information on chemical composition</li> </ul> |
| 418 | Recommendation | Purchasing specifications should be reviewed annually and revised if necessary (regarding restricted substances) based on updated knowledge of typical impurities, legal requirements and bluesign requirements (BSSL and BSBL).                                                                                                                                                                                                                  |

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 431 | Requirement    | A purchase list for chemicals, raw materials and intermediates with related supplier shall be available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 432 | Requirement    | An annual supplier evaluation program shall be in place and include the following: <ul style="list-style-type: none"> <li>• Product quality (e.g. verified by sampling or trials)</li> <li>• Well-documented shipments and products by lot, batch, article numbers, properly labelled products, etc. (e.g. <a href="#">CoA</a>)</li> <li>• Customer service, cooperation regarding information exchange (e.g. testing data on restricted substances)</li> <li>• Supplier's management system certifications (e.g. ISO 9001, 14001, 45001, 50001, etc.)</li> <li>• Social commitment of the supplier, e.g. Code of Conduct, Social Responsibility Policy</li> <li>• Delivery reliability</li> <li>• For chemicals: Correct hazard labelling of package/container based on <a href="#">SDS</a> data</li> <li>• Resource management performance (e.g. energy, water and material consumption monitoring and reduction)</li> </ul> |
| 433 | Requirement    | The supplier evaluation program shall have consequences for supplier selection and purchasing. Only qualified suppliers shall be used.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 434 | Recommendation | Supplier evaluation should be part of management system and subject to management review.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 435 | Recommendation | Regular supplier audits should be conducted at main suppliers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 525     | Requirement | Basic chemicals shall only be purchased from suppliers that are able to provide CoAs that cover relevant heavy metal impurities. for every delivery.<br><br>Depending on the basic chemical the following substances and limits may be relevant: <ul style="list-style-type: none"> <li>• Arsenic &lt;50 ppm</li> <li>• Lead &lt;100 ppm</li> <li>• Cadmium &lt;20 ppm</li> <li>• Chromium VI &lt;10 ppm</li> <li>• Mercury &lt;4 ppm</li> </ul> |
| PENDING | Requirement | For all non-registered chemical products used to manufacture registered articles, the following requirements apply: <ul style="list-style-type: none"> <li>• Purchase specifications of restricted substances with limits to be kept shall be available.</li> <li>• A filled out Product Screening Form (PSF) (or equivalent information via the <a href="#">bluesign Tool</a>) shall be provided.</li> </ul>                                    |

### 3.3.2.1.1 For the process: Converting

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | <p>An annual supplier evaluation program shall be in place and include the following:</p> <ul style="list-style-type: none"> <li>• Product quality (e.g. verified by sampling or trials)</li> <li>• Well-documented shipments and products by lot, batch, article numbers, properly labelled products, etc. (e.g. <i>CoA</i>)</li> <li>• Customer service, cooperation regarding information exchange (e.g. testing data on restricted substances)</li> <li>• Delivery reliability</li> </ul> |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | <p>For a <i>registered</i> article, only mechanical and/or thermal processes may be <i>subcontracted</i> to a non-bluesign System Partner <i>commission manufacturer</i>. There shall be no processes involving chemicals and/or emissions at these non-bluesign System Partner sites.</p> <p>The bluesign System Partner shall be responsible for ensuring their subcontractors' conformance with <i>bluesign Criteria</i> and <i>bluesign Conditions</i>, and shall provide information to bluesign about their subcontracting activities.</p> |
| PENDING | Requirement | <p>Written agreement(s) with relevant subcontractor(s) shall be available. The agreement shall clearly describe in detail the specific sub-manufacturing (both chemical/physical) processes and/or services. The agreement shall also include that the subcontractor shall commit to conforming with the bluesign Criteria.</p>                                                                                                                                                                                                                  |
| PENDING | Requirement | <p>The subcontractor(s) for chemical processes shall be subject to regular comprehensive on-site assessments by bluesign. On-site audits by the company shall at least cover: quality management, raw material-, process- and finished product control (as relevant). Assessments reports shall be available.</p>                                                                                                                                                                                                                                |
| PENDING | Requirement | <p>A purchase list for converting articles, accessories, materials with related material suppliers shall be available. (Doc requirement: ba718)</p>                                                                                                                                                                                                                                                                                                                                                                                              |

### 3.3.2.1.2 For the process: Consumer product manufacturing

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | <p>If purchasing down and feathers, the company shall ensure that the following information from the supplier of pre-washed/sterilized down and feathers is available and kept up-to date:</p> <ul style="list-style-type: none"> <li>• Contact data of the company performing the pre-washing/sterilization step</li> <li>• Confirmation of compliance with all applicable legal, environmental and OHS requirements</li> <li>• Confirmation of APEO-free washing process</li> <li>• Information on the sterilization procedure and, if relevant, chemicals used for sterilization (ideally chemical-free sterilization is performed by means of a thermal process)</li> </ul> |

### 3.3.2.1.3 For the process: Down and feather manufacturing

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | <p>If purchasing down and feathers, the company shall ensure that the following information from the supplier of pre-washed/sterilized down and feathers is available and kept up-to date:</p> <ul style="list-style-type: none"> <li>• Contact data of the company performing the pre-washing/sterilization step</li> <li>• Confirmation of compliance with all applicable legal, environmental and OHS requirements</li> <li>• Confirmation of APEO-free washing process</li> <li>• Information on the sterilization procedure and, if relevant, chemicals used for sterilization (ideally chemical-free sterilization is performed by means of a thermal process)</li> </ul> |

### 3.3.3 Monitoring of raw materials and intermediate chemicals

#### 3.3.3.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 472 | Requirement    | <p>Systematic monitoring (written procedure shall be available), based on defined restricted substance specifications, shall be conducted for non-registered chemical products that are used to manufacture <i>registered</i> articles. Possible evidences are e.g test reports from ISO 17025 accredited laboratories and supplier CoAs.</p> <p>If valid testing certificates (e.g. Oekotex Ecopassport) of chemical inputs that cover the specified restricted substances are available, additional testing may be skipped.</p> <p>For identification of testing parameters and testing frequency, please refer to the <i>Technical Guidance</i> "Guideline Input Stream Management"</p> |
| 473 | Requirement    | <p>Systematic monitoring (written procedure shall be available), based on defined restricted substance specifications, shall be conducted for non-registered materials that are used for manufacturing <i>registered</i> articles. Testing shall be conducted by ISO 17025 accredited laboratories.</p> <p>If valid testing certificates (e.g. Oekotex 100 Standard) of material inputs that do cover the specified restricted substances are available, additional testing may be skipped.</p> <p>For identification of testing parameters and testing frequency, please refer to the <i>Technical Guidance</i> "Guideline Input Stream Management"</p>                                   |
| 474 | Recommendation | Systematic monitoring according to restricted substance specifications should be conducted for all non-registered chemical products/articles, not only for those intended for toleration.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 475 | Recommendation | First deliveries of new raw materials should checked in more detail.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 477 | Recommendation | Testing of non-registered input chemical products and input articles regarding restricted substances should be part of the management system and testing records should be subject to management review.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

### 3.3.4 Quality control

#### 3.3.4.1 For material suppliers

| No.     | Level       | Statement                                                                                                                                                                                                                                                                              |
|---------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | <p>When producing <i>registered</i> products, the company shall keep records of the registered products with the following information:</p> <ol style="list-style-type: none"> <li>quantities on a purchase order level</li> <li>article numbers</li> <li>bluesign Guide ID</li> </ol> |

| No.     | Level          | Statement                                                                                                                                                             |
|---------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11      | Recommendation | <p>Share of manufactured <i>registered</i> materials (by kg, m, m<sup>2</sup>, pieces in %) should be:</p> <ul style="list-style-type: none"> <li>&gt;25 %</li> </ul> |
| PENDING | Recommendation | <p>Share of manufactured <i>registered</i> materials (by kg, m, m<sup>2</sup>, pieces in %) should be:</p> <ul style="list-style-type: none"> <li>&gt;50 %</li> </ul> |
| PENDING | Recommendation | <p>Share of manufactured <i>registered</i> materials (by kg, m, m<sup>2</sup>, pieces in %) should be:</p> <ul style="list-style-type: none"> <li>&gt;70 %</li> </ul> |

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 594 | Requirement    | Spot check regarding <b>BSSL</b> compliance of finished products shall be conducted.<br><br>A systematic compliance control (written procedure shall be available) of finished products according to BSSL compliance shall be established in the following cases: <ul style="list-style-type: none"> <li>• use of solvents with BSSL limits value (e.g. <b>DMF</b>, toluene)</li> <li>• use of metal complex dyes</li> <li>• use of formulations with reactive components such as formaldehyde and isocyanates</li> </ul> |
| 595 | Recommendation | Sustainability should be considered in packaging and shipping (e.g. methods to increase recyclability, minimal air freight).                                                                                                                                                                                                                                                                                                                                                                                              |
| 596 | Recommendation | Company should verify product quality using an in-house laboratory that follows the ISO 17025 principles.                                                                                                                                                                                                                                                                                                                                                                                                                 |

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                |
|---------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement    | For <b>registered</b> articles, appropriate packaging and shipping shall ensure that products are not damaged nor contaminated during storage and transport.                                                                                                                             |
| PENDING | Requirement    | Product packaging shall adhere to the substance limits from <ol style="list-style-type: none"> <li>1. EU Packaging Regulation (EU) 2025/40 (PPWR), and</li> <li>2. <b>REACH</b> (Regulation EC 1907/2006) with respect to <b>SVHC</b> and Annex XVII (Restricted Substances).</li> </ol> |
| PENDING | Requirement    | Material supplier shall declare out-of-scope product ranges (e.g. products for the military, medical devices, automotive products) and the related chemicals used for out-of-scope production. The need for out-of-scope product range shall be justified.                               |
| PENDING | Requirement    | In case out-of-scope product ranges are manufactured at the site that may contain substances restricted by bluesign (e.g. PFAS, certain flame retardants and biocides), appropriate segregation shall be implemented to avoid cross contamination.                                       |
| PENDING | Recommendation | If product packaging is made from polymer, it should <ol style="list-style-type: none"> <li>1. contain at least 20% recycled content, or</li> <li>2. be fully recyclable.</li> </ol>                                                                                                     |

## 3.4 Resource productivity, climate and water stewardship

### 3.4.1 Resource management and objectives

#### 3.4.1.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                              |
|-----|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 724 | Requirement    | Resource management practices shall be implemented and overseen by a designated person or team. Monitoring results for water, energy, chemicals and other raw materials shall be reviewed at least monthly to identify significant or unexplained changes, operational inefficiencies and necessary follow-up actions. |
| 725 | Requirement    | Facilities shall define and document measurable resource-saving objectives for significant resource uses, including water, energy, chemicals and other raw materials. Each objective shall include a baseline value and year, and a target value and year.                                                             |
| 726 | Requirement    | A program with measures, schedule, responsibilities, and budget shall be in place that supports achieving the resource saving objectives.                                                                                                                                                                              |
| 730 | Recommendation | Progress against resource-saving objectives, including achievements and shortfalls, should be externally communicated.                                                                                                                                                                                                 |

## 3.4.2 Climate and energy transition

### 3.4.2.1 For material suppliers

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement    | The facility shall establish a baseline for energy use and Scope 1 and Scope 2 <i>GHG</i> emissions using relevant activity data, including fuel, purchased electricity and other purchased energy consumption, set measurable reduction targets, and implement energy-saving and emission-reduction measures appropriate to its operations.                                                                                               |
| PENDING | Recommendation | The facility should set a target to reduce absolute Scope 1 and Scope 2 GHG emissions by at least 50% by 2035 from a 2025 baseline, based on the <i>SBTi</i> Corporate Near-Term Criteria V5.3.1 cross-sector absolute reduction approach. Emissions should be calculated in accordance with the GHG Protocol Corporate Standard or ISO 14064-1. External energy audits should be considered where additional technical support is needed. |
| PENDING | Recommendation | A climate transition plan looking towards 2050 should form part of the company strategy and include long-term climate targets, key actions and timelines aligned with recognised international frameworks where applicable (such as SBTi).                                                                                                                                                                                                 |
| PENDING | Recommendation | Facilities should increase the use of <i>renewable energy</i> to support decarbonisation and reduce reliance on fossil fuels. For electricity, facilities should work towards 100% renewable sourcing by 2030 through on-site generation, green electricity tariffs, PPAs or credible EACs.                                                                                                                                                |
| PENDING | Recommendation | Sites should assess relevant physical climate risks as part of climate change adaptation, such as flooding, extreme heat, drought and water scarcity, and integrate appropriate adaptation measures into site planning, emergency preparedness and resource management.                                                                                                                                                                    |

## 3.4.3 Water stewardship

### 3.4.3.1 For material suppliers

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement    | Facilities shall conduct a catchment-level water risk screening using a recognized tool (e.g., WRI Aqueduct or WWF Water Risk Filter) to identify physical, regulatory, and shared water risks associated with their basin.                                                                                                                                                                                                                                   |
| PENDING | Recommendation | Facilities located in medium- or high-risk basins should set one or more measurable water stewardship targets using a defined baseline. The targets should address the main risks identified in the basin assessment and be suitable for the facility's operations.<br><br>They may address water-use intensity, withdrawal limits, alternative water sources, critical-season water use, groundwater protection, water quality or local water replenishment. |
| PENDING | Recommendation | Facilities located in medium- or high-risk basins should develop and implement measures to achieve these targets and address the priority water risks identified through the assessment.                                                                                                                                                                                                                                                                      |
| PENDING | Recommendation | Facilities located in medium- to high-risk water basins should strengthen water stewardship beyond their own operations. This may include participating in local water-management initiatives, supporting water replenishment or restoration activities, and working with other water users, authorities or community stakeholders where appropriate.                                                                                                         |

## 3.4.4 Process monitoring and performance data

### 3.4.4.1 For material suppliers

| No. | Level       | Statement                                                                                                                                                                                                                                                                                     |
|-----|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 741 | Requirement | Resource consumption data shall be available at facility level and supported by adequate evidence, such as meter readings, consumption bills or validated records. Relevant absolute figures and <i>KPIs</i> shall be documented for a defined reference period and checked for plausibility. |
| 742 | Requirement | Resource consumption data for water, energy, chemicals and other raw materials shall be recorded at facility level at least monthly. Major consuming equipment or departments shall be monitored separately.                                                                                  |

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                            |
|-----|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 744 | Recommendation | Monthly evaluations of resource consumption should be conducted at the departmental, process, equipment, or product-group level where relevant. Applicable KPIs should cover water, energy, chemical, raw material usage, and greenhouse gas emissions to isolate hotspots and support continuous improvement.                                       |
| 748 | Recommendation | Resource efficiency should form part of the performance evaluation of production processes and products, including product-specific resource consumption. Where relevant, internal or external benchmarking should be conducted for water, energy and chemical consumption and GHG emissions at machine, process, department or product-group level. |

| No. | Level       | Statement                                                                                                                                                                                                                                                                                                                        |
|-----|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 749 | Requirement | At least annually, management shall review resource consumption and related KPIs against the previous year, the defined reference period and progress towards established objectives. Where performance has deteriorated or progress is insufficient, the causes shall be analysed and appropriate follow-up actions documented. |

| No.     | Level          | Statement                                                                                                                                                                                                                                                                        |
|---------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement    | The facility shall maintain up-to-date energy and water balance diagrams showing all major inputs, process uses, recycling loops, losses, and outputs. These diagrams shall support accurate resource tracking and help identify inefficiencies and opportunities for reduction. |
| PENDING | Recommendation | The facility should have an online resource consumption monitoring system in place that allows recording real-time energy and water consumption.                                                                                                                                 |

### 3.4.5 Resource savings and circular resource use

#### 3.4.5.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 761 | Requirement    | Resource-saving technologies and operational practices appropriate to the site's processes shall be implemented and maintained to reduce water, energy and material consumption. Where applicable, examples include: <ul style="list-style-type: none"> <li>• Thermal insulation</li> <li>• Leak detection and repair</li> <li>• Efficient lighting</li> <li>• Condensate recovery and reuse</li> <li>• Dewatering before drying</li> <li>• Closed loop water cooling</li> <li>• Optimization of rinsing water volume</li> <li>• Retention and reuse of process liquors</li> </ul> |
| 765 | Recommendation | Facilities should evaluate and, where technically, legally and economically feasible, implement advanced resource-saving and circular technologies to further reduce water, energy and material consumption and increase resource reuse or recycling. Measures may include advanced heat recovery, high-efficiency and low-resource production technologies, water or solvent recovery, beneficial use of excess heat. Applicable <a href="#">Best Available Techniques</a> (BAT) conclusions and <a href="#">BREF</a> documents should be considered when selecting measures.     |

| No.     | Level          | Statement                                                                                                                                                                                         |
|---------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Recommendation | Facilities conducting semi-continuous or continuous dyeing, printing or coating should quantify residual liquors and pastes, document their disposal routes and maintain a plan to minimise them. |

## 3.5 Environment

### 3.5.1 Wastewater

#### 3.5.1.1 Management

##### 3.5.1.1.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 806 | Requirement    | An appropriate wastewater treatment plant ( <i>WWTP</i> ) shall be installed and operated for facilities with direct discharge. The WWTP shall include all necessary treatment steps, such as biological treatment, to ensure proper wastewater quality before discharge.                                                                                                                                                                                                                                                                                                                      |
| 807 | Requirement    | Unused or leftover chemicals shall not be discharged into the wastewater treatment plant (WWTP) and shall be properly collected and disposed of through approved third-party contractors. Discharge of process-related effluents containing non-fixed chemicals (e.g. residual finishing liquors) to the WWTP is permitted, provided it is part of normal operations and does not cause environmental harm or <i>nonconformity</i> nonconformity with applicable discharge limits. Minimal rinsing residues from container or drum cleaning may also enter the WWTP under the same conditions. |
| 809 | Recommendation | At least one measurable action should be taken to reduce the environmental impact of wastewater. Examples include: <ul style="list-style-type: none"> <li>• installing pre-treatment WWTP on-site for indirect discharge</li> <li>• installing recycling systems such as reverse osmosis or multi-effect evaporators</li> <li>• optimizing rinsing cascades</li> <li>• maintaining baths through filtration</li> <li>• applying electrodialysis for metal solutions</li> <li>• reusing spinning baths in wet spinning processes</li> </ul>                                                     |
| 810 | Recommendation | Systematic actions should be taken to reduce the environmental impact of wastewater, including load, volume, and toxicity. These may include: <ul style="list-style-type: none"> <li>• reducing discharged COD or other relevant parameters</li> <li>• minimizing the use of low-biodegradability chemicals</li> <li>• applying analytical control of bath dosing and processing conditions</li> </ul>                                                                                                                                                                                         |
| 811 | Recommendation | Plans and measurable objectives for reduced wastewater impact should be defined. These may include: - evaluation of the top COD-contributing chemicals, and - consideration of machinery, processes, and chemical changes (e.g., improved biodegradability).                                                                                                                                                                                                                                                                                                                                   |
| 812 | Recommendation | The facility should establish separate treatment for highly polluted partial wastewater streams, with methods adapted to the specific contaminants.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 813 | Recommendation | Wastewater management should be part of the company strategy, including long-term reduction targets, related processes, and timelines.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 814 | Recommendation | The company should demonstrate reductions in wastewater-related impacts and communicate the results transparently to relevant stakeholders.                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                   |
|---------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 816     | Requirement | If domestic wastewater is treated in an on-site septic tank system with direct discharge, it shall be further treated using suitable biological methods or equivalent measures to ensure compliance with local discharge legal requirements. Fecal sludge shall be collected and disposed of by an authorized third-party service provider. |
| PENDING | Requirement | In case a <i>nonconformity</i> is detected in the wastewater test report or internal testing against discharge limits, the company shall conduct a root cause analysis (RCA) and implement a corrective action plan (CAP)                                                                                                                   |
| PENDING | Requirement | Wastewater resulting from sludge drying operations shall be returned to the WWTP.                                                                                                                                                                                                                                                           |
| PENDING | Requirement | In case odor emissions from wastewater operations are identified based on observable conditions (e.g. noticeable odor during site inspection, complaints, or process characteristics with high odor potential), the company shall implement appropriate treatment measures to reduce odor emissions to an acceptable level.                 |

### 3.5.1.2 Monitoring

#### 3.5.1.2.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 820 | Requirement    | Critical chemicals (e.g., <i>PFAS</i> -containing chemicals, flame retardants, antimicrobial agents, organic solvents) shall not be discharged into the process wastewater stream. Where discharge cannot be fully avoided, separate collection and adequate disposal shall be implemented.                                                                                                                                                               |
| 824 | Requirement    | Permethrin residual liquors shall be collected separately and either disposed of as liquid waste by an authorized third party or treated on site with alkaline (partial stream) before discharge to wastewater. Separate collection and treatment procedures shall be documented in an <i>SOP</i> or equivalent document.                                                                                                                                 |
| 825 | Recommendation | A <i>PEC/PNEC</i> calculation should be performed, including a real exposure scenario considering site-specific conditions, to demonstrate that Permethrin application has no adverse impact on aquatic bodies.                                                                                                                                                                                                                                           |
| 826 | Requirement    | As an exception, limited discharge of critical chemicals (e.g. organic solvents from machine cleaning) may be permitted. To qualify for this exception, a documented, site-specific assessment shall be provided that demonstrates the wastewater treatment system is capable of effectively removing or degrading the substances without negative impacts on treatment performance, sludge quality, the receiving environment, or regulatory compliance. |

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 831 | Requirement    | Monitoring shall cover all legal requirements concerning parameters, sampling methods, and frequency, ensuring that the content and amount of pollutants are properly assessed and documented.<br><br>In the case of indirect discharge without on-site pretreatment, monitoring shall include the unpurified wastewater.                                                                                                                                                                                                                                                                                        |
| 832 | Recommendation | Wastewater monitoring should exceed legal requirements in terms of testing frequency and/or the number of relevant parameters. For processes involving substances such as tetrachloroethene, permethrin, permanganate, chromium VI, and APEO, relevant parameters should be measured in untreated wastewater, and results should be used to identify and control potential risks prior to discharge. In the case of indirect discharge without on-site pretreatment, monitoring should focus on raw wastewater to ensure that pollutant loads are adequately controlled before being sent to external treatment. |
| 833 | Requirement    | The monitoring program shall support the proper operation of the <i>WWTP</i> . At a minimum, <i>COD</i> and pH shall be monitored, and additional parameters shall be included as necessary depending on the specific wastewater chemistry.                                                                                                                                                                                                                                                                                                                                                                      |
| 834 | Requirement    | A basic emissions register for wastewater shall be available and shall include: <ul style="list-style-type: none"> <li>• all wastewater discharge points,</li> <li>• annual and monthly discharge volumes,</li> <li>• identification of direct or indirect discharge (including name and location of third-party <i>WWTP</i> where applicable), and</li> <li>• applicable discharge licenses or permits.</li> </ul> Documentation such as annual discharge monitoring records and photos of discharge points shall be maintained.                                                                                |
| 835 | Recommendation | A detailed emissions register for wastewater should be available, including information on machines and processes, main wastewater streams, and related typical emissions and loads (e.g., kg <i>COD/a</i> ).                                                                                                                                                                                                                                                                                                                                                                                                    |
| 836 | Recommendation | Monitoring of partial wastewater streams should be applied.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 837 | Recommendation | Systematic statistics should be kept for monitoring data. Systematic means that internal measurements (parameters and testing frequencies) are selected based on the detailed emission register, so that, for example, the total <i>COD</i> load can be allocated to the main sources.                                                                                                                                                                                                                                                                                                                           |
| 838 | Recommendation | Wastewater monitoring should be part of the companies continual improvement program. Monitoring data and statistics should be used to improve wastewater quality through technical and organizational measures and should be regularly reviewed internally (e.g., as part of environmental performance reviews).                                                                                                                                                                                                                                                                                                 |
| 839 | Recommendation | Successful optimization of wastewater treatment should be demonstrated based on monitoring data. Documented statistics indicating reduction of pollution load should be available.                                                                                                                                                                                                                                                                                                                                                                                                                               |

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 851     | Requirement    | If there is an on-site <a href="#">WWTP</a> , it shall be appropriate in terms of capacity, design, and adequate treatment steps for the relevant pollutants, and it shall be properly operated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 852     | Requirement    | <p>Sludge shall be stored and disposed of properly. This includes specifically:</p> <ul style="list-style-type: none"> <li>• Hazardous sludge shall be properly classified and collected separately in suitable collection areas that prevent sludge to leach into the environment</li> <li>• Sludge shall be disposed of by an accredited disposal company</li> <li>• Full information on the disposal of every sludge type shall be available</li> <li>• Sludge from industrial wastewater treatment shall not be used in agriculture or disposed of in uncontrolled landfills</li> <li>• In exceptional cases, if local and national regulations allow the land application, agricultural use, or use of sludge as fertiliser, such practices may be accepted, provided that the sludge fulfils the bluesign limit values for sludge testing (See: <a href="#">Limit values for sludge testing [52]</a>) and that proper documentation of compliance and disposal is available</li> </ul> |
| 853     | Requirement    | A general understanding of wastewater emission loads (quantity and type) shall be available, and treatment steps shall be adequate and well documented (e.g., flow chart with treatment steps, tank/basin capacities).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 854     | Requirement    | The <a href="#">WWTP</a> shall be maintained in good condition and its effectiveness shall be monitored and recorded through regular inspections, well-kept measurement devices, proper housekeeping of the WWTP lab, and availability of monitoring data.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 855     | Requirement    | WWTP records shall demonstrate no incidents - such as operational failures or discharge limit exceedances - within the past three years. Where incidents have occurred, appropriate corrective actions shall be implemented.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 856     | Requirement    | Emergency procedures shall be available, and preventive measures and equipment shall be established to manage incidents and irregularities effectively. This shall include, as applicable, systems such as monitoring and alarm devices (e.g. level sensors), automatic shutdown or bypass mechanisms, containment measures (e.g. retention basins or holding tanks), and backup provisions to prevent uncontrolled discharges.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 857     | Requirement    | WWTP staff shall be trained in the operation and control of the site-specific wastewater treatment process, including key treatment steps, critical control parameters, chemical handling, and emergency response. Training records shall be available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 859     | Recommendation | WWTP system should be optimized with adequate measures; for example, SOPs for operation should be available, a sophisticated WWTP laboratory should be in place, automatic monitoring should be installed, and WWTP engineers should be well trained.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 860     | Recommendation | Resource aspects should be considered for the WWTP, such as reducing electricity consumption through intelligent and automated aeration/oxygen blowers with appropriate monitoring, or saving chemicals by controlled dosing for processes like pH adjustment, disinfection, and flocculation/coagulation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 861     | Recommendation | The WWTP should set a standard for the industry and <a href="#">Best Available Techniques</a> (BAT) should be implemented, for example by using forward-looking technologies such as membrane processes or ozone treatment, or by using tailor-made process steps such as anaerobic or partial stream treatments.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 862     | Requirement    | <p>Wastewater that may contain oil or grease shall be collected and treated using an appropriate oil separation or removal system. This includes, where applicable, compressor condensate, canteen wastewater, runoff from fuel storage and parking areas, and process water containing mineral or silicone oils. Such process water may result from removing spinning, knitting or weaving lubricants, or from silicone softening and finishing processes.</p> <p>Separated oil, grease and oily condensate shall be collected separately and stored in a dry, contained area. It shall be disposed of by a qualified third-party contractor. Disposal records shall be retained for at least three years</p>                                                                                                                                                                                                                                                                               |
| PENDING | Requirement    | Wastewater shall not be diluted with the intention of complying with wastewater limit values.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| PENDING | Recommendation | Facilities should implement real-time pollution monitoring systems to continuously track key wastewater parameters such as pH, temperature, chemical oxygen demand, and other relevant pollutants. These systems should enable early detection of abnormalities, support timely corrective actions, and help ensure ongoing compliance with discharge requirements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement    | Where the share of chemical products <a href="#">registered</a> with bluesign used at the production site is less than 50% of the total chemical volume used, the site shall perform untreated wastewater testing. The test results shall comply with the substance limit values for untreated wastewater specified (See: <a href="#">Substance limit values for untreated wastewater [53]</a> ). Testing shall be conducted at the relevant raw wastewater sampling point before wastewater treatment, and the corresponding laboratory test report shall be provided as evidence.                                                          |
| PENDING | Requirement    | In case an exceedance of the untreated wastewater substance limit values is detected in the wastewater test report or internal testing, the company shall conduct a root cause analysis (RCA), document the RCA results and implement a corrective action plan (CAP).                                                                                                                                                                                                                                                                                                                                                                        |
| PENDING | Requirement    | The site shall assess microplastic shedding into wastewater by testing untreated raw wastewater or relevant process wastewater streams. The assessment shall be carried out using ISO 4484-2 or an equivalent validated method and shall determine the microplastic particle concentration before wastewater treatment. The company shall calculate the microplastic load entering the wastewater treatment system by multiplying the average daily wastewater flow rate with the microplastic particle concentration. The results shall be expressed in microplastic particles per day or if possible in mg microplastic particles per day. |
| PENDING | Recommendation | Where significant microplastic shedding is identified based on the microplastic shedding assessment, the site should evaluate and implement reduction measures. These should include, where applicable, improving fibre or fabric quality, optimising high-shedding processes such as washing, brushing, sanding or sueding, installing local screens or filtration before the main wastewater treatment system, and properly collecting and managing retained fibres, sludge and filter residues.                                                                                                                                           |

### 3.5.1.2.1.1 For the process: Fibre manufacturing

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                      |
|---------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | For pulp used in fiber production, bleaching shall be carried out without the use of elemental chlorine. The <a href="#">AOX</a> load in wastewater from the pulping and bleaching process shall not exceed 0.170 kg AOX/ADt pulp. ADt means air-dry metric ton of pulp, corresponding to pulp with a moisture content of 10%. |

### 3.5.1.3 Direct wastewater discharge

#### 3.5.1.3.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                             |
|-----|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 871 | Requirement    | Legal industry specific and wastewater limits and legal limits for domestic wastewater shall be kept.                                                                                                                                                 |
| 872 | Requirement    | The bluesign limits for direct discharge shall be kept. Testing shall be conducted at the frequency specified in the applicable limit value tables (See: <a href="#">Direct wastewater discharge [50]</a> ) and shall provide representative results. |
| 873 | Recommendation | The main discharge figures should be publicly available.                                                                                                                                                                                              |

| No. | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |             | For direct discharge to an aquatic body, the overall wastewater treatment system shall achieve a <a href="#">COD</a> mass-load removal efficiency of at least 85%. The COD removal efficiency shall be calculated on a monthly basis using representative measurements of COD concentration and wastewater flow at the untreated influent and final treated-effluent sampling points, as follows:                                                                             |
| 875 | Requirement | $Removal\ efficiency = \frac{((C_{in} \cdot Q_{in}) - (C_{out} \cdot Q_{out})) \cdot 100}{(C_{in} \cdot Q_{in})} \quad (1)$ <p>C = COD concentration</p> <p>Q = wastewater flow</p> <p>Influent and final-effluent samples shall be representative of normal operation and comparable with each other. For continuous treatment systems, the sampling time shall consider the time needed for wastewater to pass through the treatment system (hydraulic retention time).</p> |

### 3.5.1.3.1.1 For the process: Fiber manufacturing

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                          |
|---------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | For viscose fiber manufacturing, the bluesign limit values for wastewater discharge shall apply (See: <a href="#">Direct wastewater discharge [50]</a> ). In addition, the specific discharge parameters and limit values defined for viscose fiber manufacturing shall be met (See: <a href="#">Emission to water limit values for viscose staple fiber manufacturing [61]</a> ). |

### 3.5.1.3.1.2 For the process: Yarn manufacturing

| No. | Level          | Statement                                                                                                                 |
|-----|----------------|---------------------------------------------------------------------------------------------------------------------------|
| 874 | Recommendation | bluesign recommended limits for direct discharge should be kept (See: <a href="#">Direct wastewater discharge [50]</a> ). |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | <p>When treated wastewater is directly discharged to an aquatic body from production sites with chemical use, aquatic ecotoxicity shall be assessed annually according to the highest trophic level for which testing is available through an accredited laboratory. Testing shall be performed in the following order of preference:</p> <ol style="list-style-type: none"> <li>1. Fish egg toxicity</li> <li>2. Daphnia toxicity</li> <li>3. Algae toxicity</li> <li>4. Bacterial toxicity</li> </ol> <p>Use of a lower trophic level test shall only be permitted where testing at a higher trophic level is not reasonably available. Compliance shall be demonstrated in accordance with the requirements specified by bluesign (See: <a href="#">Aquatic ecotoxicity requirements for direct discharge [51]</a>).</p> |

### 3.5.1.3.1.3 For the process: Textile manufacturing

| No. | Level          | Statement                                                                                                                 |
|-----|----------------|---------------------------------------------------------------------------------------------------------------------------|
| 874 | Recommendation | bluesign recommended limits for direct discharge should be kept (See: <a href="#">Direct wastewater discharge [50]</a> ). |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | <p>When treated wastewater is directly discharged to an aquatic body from production sites with chemical use, aquatic ecotoxicity shall be assessed annually according to the highest trophic level for which testing is available through an accredited laboratory. Testing shall be performed in the following order of preference:</p> <ol style="list-style-type: none"> <li>1. Fish egg toxicity</li> <li>2. Daphnia toxicity</li> <li>3. Algae toxicity</li> <li>4. Bacterial toxicity</li> </ol> <p>Use of a lower trophic level test shall only be permitted where testing at a higher trophic level is not reasonably available. Compliance shall be demonstrated in accordance with the requirements specified by bluesign (See: <a href="#">Aquatic ecotoxicity requirements for direct discharge [51]</a>).</p> |

### 3.5.1.3.1.4 For the process: Fabricated metal part manufacturing

| No.     | Level       | Statement                                                                                                                                                                                                                       |
|---------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | For fabricated metal part manufacturing, the bluesign limit values for wastewater discharge shall apply (See: <a href="#">(Electro-)chemical wet processes [62]</a> , <a href="#">Other surface treatment processes [62]</a> ). |

### 3.5.1.4 Indirect wastewater discharge

#### 3.5.1.4.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 881 | Requirement    | A known third-party <a href="#">WWTP</a> shall be used for indirect discharge and the contractual limits for discharge to this WWTP shall be kept. Documentation on the external WWTP shall be available (address, process description, contract including limits for incoming wastewater). In case a contaminant cannot be treated by the receiving WWTP, sufficient on-site pretreatment shall be performed. |
| 886 | Recommendation | Voluntarily lower and/or additional limit values for discharge to third-party WWTP should be defined.                                                                                                                                                                                                                                                                                                          |

| No. | Level       | Statement                                                                                                                                                                                           |
|-----|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 887 | Requirement | Measurements for indirect discharge to third-party WWTP shall be performed according to bluesign Criteria, and the limits shall be kept (See: <a href="#">Indirect wastewater discharge [52]</a> ). |

### 3.5.2 Air emissions

#### 3.5.2.1 Management of process air emissions

##### 3.5.2.1.1 For material suppliers

| No. | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 931 | Requirement | <p><a href="#">VOC</a> relevance shall be assumed when the annual solvent consumption exceeds the threshold of &gt;5 t/year.</p> <p>For material supplier production sites, the requirements for CMR solvents based shall apply when the annual consumption of CMR solvents exceeds 5 t/year.</p> <p>Material suppliers subject to the requirements for CMR solvents shall implement either an off-gas abatement system at all relevant emission points or a solvent recycling system.</p> <p>Compliance with the applicable emission requirements shall be demonstrated by meeting at least one of the requirements specified in the corresponding tables (See: <a href="#">Emission requirements for VOC-relevant production sites [64]</a>, <a href="#">Emission requirements for textile finishing and heat-setting processes [64]</a>, <a href="#">Performance requirements for off-gas abatement systems at CMR-solvent-relevant material suppliers [65]</a>).</p> |

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 904 | Requirement    | Valid permits for process emissions shall be available and their requirements shall be known.                                                                                                                                                                                                                                                                                                                                                           |
| 905 | Requirement    | Appropriate measures shall be implemented to reduce the environmental impact of process emissions. These shall include, as applicable, the installation and proper operation of emission control systems; substitution of <a href="#">VOC</a> -containing or other high-emission materials with lower-emission alternatives; use or optimization of lower-emission processes; and systematic monitoring and maintenance of off-gas abatement equipment. |
| 906 | Recommendation | Systematic actions should be implemented to reduce the environmental impact of process emissions. Such actions can include identifying the emission potential of chemicals, applying appropriate emission-factor concepts, and assessing how product recipes influence resulting emissions.                                                                                                                                                             |
| 907 | Requirement    | Measurable objectives and plans to reduce the impact of air emissions shall be defined.                                                                                                                                                                                                                                                                                                                                                                 |
| 908 | Recommendation | Impact on air emissions should be considered before installation of new machines and related chemicals and chemical products.                                                                                                                                                                                                                                                                                                                           |
| 909 | Recommendation | Off-gas management should be part of the company strategy, with long-term objectives for all process emissions and details about planned reduction potentials, related processes, and timelines included in documents such as the environmental policy or sustainability report.                                                                                                                                                                        |
| 910 | Recommendation | Success on lowering impact of process emissions should be publicly communicated (e.g. via sustainability report and/or company website).                                                                                                                                                                                                                                                                                                                |

### 3.5.2.2 Air emission monitoring

#### 3.5.2.2.1 For material suppliers

| No. | Level          | Statement                                                                                                 |
|-----|----------------|-----------------------------------------------------------------------------------------------------------|
| 916 | Requirement    | Monitoring shall cover the legal requirements concerning parameters and frequency.                        |
| 917 | Recommendation | It is recommended that monitoring exceeds legal requirements with respect to frequency and/or parameters. |

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 918 | Requirement    | In case of VOC relevance, fugitive VOC emissions shall remain below 20% of total solvent input, with a reduction goal of below 10%, and calculated with a VOC mass balance annually.                                                                                                                                                                                                                                                                            |
| 919 | Requirement    | An air emissions inventory/registry shall be available and maintained. The inventory shall include: <ul style="list-style-type: none"> <li>• Overview map of emission point sources (including buildings and main equipment)</li> <li>• List of point sources with connected treatment systems, processes and related emissions</li> <li>• Identification code for each emission source - Description of the relevant process</li> </ul>                        |
| 920 | Recommendation | An air emissions inventory/registry should include in addition to the basic inventory: <ul style="list-style-type: none"> <li>• Off-gas duct connection plan</li> <li>• Statistics on measurement results and applicable limits</li> <li>• Equipment name</li> <li>• Volumetric off-gas flow</li> <li>• Nominal capacity (e.g., boiler 6 MW)</li> <li>• Stack or final discharge port with unique code/name</li> <li>• Defined maintenance intervals</li> </ul> |
| 921 | Recommendation | Systematic statistics should be kept for monitoring process air emissions to demonstrate performance and compliance, including well-documented mass balance, key figures, and online measurement data.                                                                                                                                                                                                                                                          |

| No.     | Level       | Statement                                                                                       |
|---------|-------------|-------------------------------------------------------------------------------------------------|
| PENDING | Requirement | Off-gas streams shall not be diluted with the intention of complying with off-gas limit values. |

#### 3.5.2.2.1.1 For the process: Yarn manufacturing

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Recommendation | For singeing processes, dust emissions should not exceed 20 mg/Nm <sup>3</sup> where emissions are captured and discharged through a stack. Appropriate abatement measures (e.g. filters, optimized burners) should be implemented to maintain this level. Where emissions are not captured, measures should be in place to minimize dust release, and no significant dust accumulation or visible emissions should be observed in the working area. |

#### 3.5.2.2.1.2 For the process: Textile manufacturing

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Recommendation | For singeing processes, dust emissions should not exceed 20 mg/Nm <sup>3</sup> where emissions are captured and discharged through a stack. Appropriate abatement measures (e.g. filters, optimized burners) should be implemented to maintain this level. Where emissions are not captured, measures should be in place to minimize dust release, and no significant dust accumulation or visible emissions should be observed in the working area. |

### 3.5.2.3 Off-gas treatment systems

#### 3.5.2.3.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 932 | Requirement    | <p>Off-gas treatment system or other air management systems for process emissions shall be available and appropriate. The system shall effectively capture and treat exhaust air from relevant processes through suitable technologies such as scrubbers, condensers, or activated carbon filters.</p> <p>Where full off-gas treatment is not applicable, equivalent air management measures (e.g., controlled ventilation or burner maintenance of stenter and dryer) shall be implemented to minimize emissions, and emission testing records from control devices or abatement processes shall be available as supporting documentation.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 933 | Requirement    | On-site off-gas treatment systems shall be installed and operated according to <a href="#">SOPs</a> . Their operation and efficiency shall be monitored through regular inspections and recorded data. Maintenance measures, such as scrubbing media replacement, pH checks, or filter control, shall be implemented and documented.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 934 | Requirement    | A flow chart for the off-gas systems shall be available, showing all relevant emission ports with connected pipes and off-gas systems.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 935 | Requirement    | Off-gas treatment systems shall be maintained in good condition and appropriately controlled. Daily visual checks and preventive maintenance, such as filter replacement and inspection for corrosion or leakages, shall be carried out. Malfunctions shall be prevented through regular monitoring and timely corrective action.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 936 | Requirement    | <p>The efficiency of off-gas treatment systems shall be monitored and recorded, either internally or by an external third party.</p> <p>For thermal oxidizers (TO), regenerative thermal oxidizers (<a href="#">RTO</a>), or regenerative catalytic oxidizers (RCO), <a href="#">TOC</a> abatement efficiency monitoring may be exempted if outlet TOC, carbon monoxide (CO) concentrations, and flame temperature are continuously monitored, and the monitoring equipment is regularly maintained and calibrated.</p> <p>If high abatement efficiency for CMR substances is claimed using only activated carbon (A/C) filtration and/or wet scrubbing, without a thermal or catalytic oxidation system, the site shall demonstrate consistent abatement performance through additional control and verification measures. These shall include, at minimum:</p> <ol style="list-style-type: none"> <li>1. Online monitoring for high CMR solvent use: Where annual CMR solvent consumption exceeds 50 t/year, online monitoring shall be installed downstream of the final abatement stage. The monitoring shall track outlet TOC/VOC concentration to detect breakthrough or loss of abatement performance before non-compliant emissions occur.</li> <li>2. Site-specific breakthrough control system: Where annual CMR solvent consumption does not exceed 50 t/year, the site shall demonstrate an effective system to control breakthrough. This shall include a documented calculation to determine A/C media replacement or regeneration frequency based on off-gas flow rate and pollutant mass load, including inlet concentration and operating time or solvent throughput. The calculation shall be supported by periodic outlet measurements, portable VOC/TOC measurements, solvent-specific measurements, indicator tube measurements or other technically justified methods. Replacement or regeneration shall be carried out in accordance with the calculated interval or earlier if breakthrough indicators occur.</li> <li>3. Periodic third-party off-gas efficiency testing: Periodic off-gas abatement efficiency testing shall be carried out by a competent third party and linked to machine operating hours or solvent throughput, designed to detect performance loss due to media saturation or breakthrough</li> </ol> <p>If consistent abatement performance cannot be demonstrated with sufficient evidence, the abatement concept shall be considered inadequate for CMR control.</p> |
| 937 | Requirement    | Operator for off-gas treatment systems shall be well trained and possess the necessary technical background, relevant trainings, and required licenses.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 938 | Recommendation | Off-gas treatment system should be optimized ( <a href="#">SOP</a> for operation well documented, high efficiency for the most important loads, automatic monitoring installed and well trained and educated engineer available).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 939 | Requirement    | Procedures and equipment shall be in place to effectively manage incidents and irregularities in off-gas treatment systems. This shall include documented standard operating procedures (SOPs) for incidents (e.g. system malfunction, shutdown or bypass), and appropriate equipment such as monitoring and alarm systems (e.g. sensors), as well as automatic shutdown or interlock mechanisms to prevent uncontrolled emissions.                                                                                      |
| 940 | Recommendation | Off-gas treatment systems should represent the best available techniques (BAT) for the industry. Systems should incorporate advanced and energy efficient technologies such as optimized air management, condensation and scrubber units, electrostatic precipitators, or RTOs to achieve high abatement efficiency. Preventive and forward looking measures, including insulation, heat recovery, and regular maintenance, should also be applied. Evidence or documentation of BAT implementation should be available. |
| 941 | Recommendation | For VOC-relevant sites with high emission loads, and RTO should be installed.                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 956     | Requirement    | <p>For on-site power or steam generation units operated with fuels containing sulfur content &gt;1% or with coal, appropriate off-gas treatment systems shall be installed, operated and maintained to ensure compliance with applicable permit requirements or legally binding emission limits. The installed off-gas treatment systems shall comply with the applicable emission limits for dust, SO<sub>2</sub>, NO<sub>x</sub> (See: <a href="#">Emissions from power generation and boiler house (supply units) [65]</a>).</p> <p>Where coal is used as a fuel, mercury emissions shall be controlled to comply with a limit of 0.25 kg/h or 0.05 mg/Nm<sup>3</sup>.</p> <p>The off-gas treatment systems shall be operated, monitored, and documented according to the facility's established air-management procedures. The operation, inspection, training and incident preparedness requirements defined for general off-gas systems also apply to these units..</p> |
| 964     | Recommendation | Low-emission fuels should be used for on-site energy generation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| PENDING | Requirement    | <p>Off-gas measurements for the determination of total organic carbon (TOC) or total volatile organic compounds (TVOC) at VOC-relevant facilities shall be conducted by a qualified third party using standardized and recognized methods. <a href="#">Flame ionization detector</a> (FID) based measurement shall be used as the preferred reference method (e.g. EN 12619 or ISO 25140).</p> <p>Where FID measurement is not locally available, alternative standardized methods such as US EPA Method 18 or equivalent EN or ISO standards shall be applied. Measurements shall be performed at relevant emission points after off-gas treatment under representative operating conditions and documented accordingly.</p>                                                                                                                                                                                                                                                 |

### 3.5.2.3.1.1 For the process: Fibre manufacturing

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                              |
|---------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | <p>For polyester fiber manufacturing facilities, the average annual emissions of VOCs from point sources and fugitive emissions shall not exceed the following limit values:</p> <ul style="list-style-type: none"> <li>• 1.2 g/kg PET chips</li> <li>• 10.3 g/kg filament fiber</li> </ul>                                                                            |
| PENDING | Requirement | <p>For acrylic fiber manufacturing facilities, the annual average specific emission of acrylonitrile (CAS 107-13-1), including emissions generated during polymerization and up to the solution ready for spinning, shall not exceed 1.0 g/kg fiber produced.</p> <p>Acrylonitrile emissions shall be captured, and an off-gas cleaning system shall be installed.</p> |
| PENDING | Requirement | <p>For lyocell fiber production, the solvent recycling rate shall be at least 99%.</p> <p>An appropriate environmental program defining responsibilities, budget and timelines shall be established to support implementation and continuous achievement of this recycling rate.</p>                                                                                   |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | <p>For acetate fiber production, acid management shall be implemented to support continuous improvement of environmental performance. Solvent management shall be implemented to achieve a solvent recovery rate of at least 99% for relevant solvents, such as dichloromethane, methanol and acetone.</p> <p>An appropriate environmental program defining responsibilities, budget and timelines shall be established to support implementation and continuous achievement of this recycling rate.</p> |

### 3.5.2.4 Discharge

#### 3.5.2.4.1 For material suppliers

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                  |
|---------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 946     | Requirement    | Air emission limits from permit or legal industry specific limits shall be kept.                                                                                                                                                                                                                                                                                           |
| 947     | Requirement    | The bluesign limits for processes air emissions shall be kept. (See: <a href="#">Emission requirements for VOC-relevant production sites [64]</a> , <a href="#">Emission requirements for textile finishing and heat-setting processes [64]</a> , <a href="#">Performance requirements for off-gas abatement systems at CMR-solvent-relevant material suppliers [65]</a> ) |
| 948     | Recommendation | The main off-gas figures should be publicly available.                                                                                                                                                                                                                                                                                                                     |
| 949     | Recommendation | Voluntary lower and/or additional off-gas limits should be internally defined.                                                                                                                                                                                                                                                                                             |
| PENDING | Requirement    | The odor intensity levels set by the local authorities shall be kept and valid neighborhood complaints shall be evaluated and adequately followed up.                                                                                                                                                                                                                      |

##### 3.5.2.4.1.1 For the process: Fiber manufacturing

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                        |
|---------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | For viscose fiber manufacturing, the bluesign limit values for air emissions shall apply. In addition, the specific discharge parameters and limit values defined for viscose fiber manufacturing shall be met (See: <a href="#">Emission to air limit values for viscose staple fiber manufacturing [65]</a> ). |

#### 3.5.2.4.2 For material suppliers

| No. | Level          | Statement                                                                        |
|-----|----------------|----------------------------------------------------------------------------------|
| 946 | Requirement    | Air emission limits from permit or legal industry specific limits shall be kept. |
| 948 | Recommendation | The main off-gas figures should be publicly available.                           |
| 949 | Recommendation | Voluntary lower and/or additional off-gas limits should be internally defined.   |

##### 3.5.2.4.2.1 For the process: Consumer product manufacturing

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                  |
|---------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 947     | Requirement | The bluesign limits for processes air emissions shall be kept. (See: <a href="#">Emission requirements for VOC-relevant production sites [64]</a> , <a href="#">Emission requirements for textile finishing and heat-setting processes [64]</a> , <a href="#">Performance requirements for off-gas abatement systems at CMR-solvent-relevant material suppliers [65]</a> ) |
| PENDING | Requirement | The odor intensity levels set by the local authorities shall be kept and valid neighborhood complaints shall be evaluated and adequately followed up.                                                                                                                                                                                                                      |

### 3.5.2.5 Ozone-depleting substances

#### 3.5.2.5.1 For material suppliers

| No. | Level       | Statement                                                                                                                                                       |
|-----|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 972 | Requirement | Company shall evaluate equipment for the possibility that it contains ozone-depleting substances (ODS). Class I ODS as indicated in the BSBL shall not be used. |

| No. | Level          | Statement                                                                                                                                                                                                                                               |
|-----|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 975 | Requirement    | Equipment containing ODS shall be regularly checked for leaks using appropriate methods and maintained according to a documented SOP. Detected leaks shall be repaired promptly, and records of inspections, repairs and servicing shall be maintained. |
| 977 | Recommendation | Objectives for substitution of ODS should be defined.                                                                                                                                                                                                   |
| 978 | Recommendation | Achievements in ODS reduction should be demonstrated.                                                                                                                                                                                                   |

| No.     | Level       | Statement                                                                                                                                                                                                      |
|---------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | Servicing, repair and decommissioning of equipment containing ODS refrigerants shall be carried out by qualified personnel. The refrigerants shall be recovered and shall not be released into the atmosphere. |

### 3.5.3 Waste, soil & groundwater management

#### 3.5.3.1 Waste management

##### 3.5.3.1.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 991 | Requirement    | Disposal documents for <i>hazardous waste</i> shall be available, and disposal practices shall be controlled and appropriate. All hazardous waste shall be managed according to local regulations and the bluesign System requirements, with disposal routes and service providers properly documented and verified.                                                                                                                                  |
| 992 | Requirement    | Valid permits for waste disposal shall be available.                                                                                                                                                                                                                                                                                                                                                                                                  |
| 993 | Requirement    | Contracts with disposal companies shall be available and valid.                                                                                                                                                                                                                                                                                                                                                                                       |
| 995 | Requirement    | Disposal companies shall be officially qualified, accredited, or certified, and evidence of such status shall be available.                                                                                                                                                                                                                                                                                                                           |
| 996 | Requirement    | Hazardous waste shall be separated from non-hazardous waste and stored appropriately to prevent cross-contamination or environmental impact. Procedures for collection, segregation, storage, and transport shall be documented accordingly.                                                                                                                                                                                                          |
| 998 | Requirement    | Various waste types shall be collected and stored separately, including hazardous waste, recyclables (such as paper, cardboard, metal, plastic, and wood), and general waste, to ensure proper handling and recycling.                                                                                                                                                                                                                                |
| 999 | Requirement    | Specific measures for waste reduction shall be implemented, such as the use of returnable containers, recycling of solvents, reuse or recycling of textile or metal waste, or other measures that minimize waste generation.                                                                                                                                                                                                                          |
| 999 | Recommendation | Waste management should be integrated into the company's strategy and include systematic waste-reduction measures based on a documented waste balance. The site should define plans, objectives and measurable targets following the waste hierarchy: avoid, reduce, reuse, recycle and recover, with disposal used only as a last resort. Landfill should be avoided where possible and, if unavoidable, limited to officially controlled landfills. |

| No.  | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1000 | Requirement | A detailed waste balance shall be available for all relevant waste types. The detailed balance shall indicate monthly waste quantities and types, annual quantities of hazardous and non hazardous waste, disposal companies, and disposal routes (e.g., composting, recycling, waste-to-energy, or landfill). For hazardous waste, the waste origin and hazard classification (e.g., flammable, toxic) shall also be specified. |

| No.  | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                   |
|------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1002 | Requirement    | Training on waste reduction and separation shall be provided to employees whose roles involve waste generation, handling, segregation, or supervision of waste-related activities. The training shall cover proper handling, storage and disposal procedures, waste minimization practices, and the use of personal protective equipment. Training frequency and participation records shall be documented. |
| 1005 | Recommendation | Achievements in waste reduction should be demonstrated with evidence and communicated externally. Improvements should be based on measurable data such as baseline year, quantity, percentage change, and applied reduction strategies, and may be reported through environmental reports, company websites, or public platforms.                                                                           |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1007    | Requirement | On-site incineration for non-hazardous and/or hazardous waste shall be carried out with an official permit. Measurement report for dioxin and furans shall be available.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 1008    | Requirement | On-site incineration for non-hazardous and/or hazardous waste shall be carried out only under official permit and controlled conditions to minimize emissions of dioxins and furans.<br><br>The process shall maintain a minimum combustion temperature of 850°C with a residence time of at least two seconds, or 1100°C if the chlorine content of the waste exceeds 1%. Where direct emission measurements are not feasible, compliance shall be ensured through equivalent process controls, such as the use of a scrubber, achieving emission levels not exceeding 0.1 ng TEF/m <sup>3</sup> or 0.3 ng TEF/l. |
| PENDING | Requirement | Concentrate from <i>zero-liquid discharge</i> (ZLD) systems shall not be discharged to the environment or water bodies, but instead responsibly treated as solid waste.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| PENDING | Requirement | Disposal of thermoplastic hotmelts, textiles treated with thermoplastic hotmelts, and reacted/cured reactive hotmelt shall be conducted according to the recommendations of the material supplier/SDS and internal waste disposal procedures.                                                                                                                                                                                                                                                                                                                                                                      |
| PENDING | Requirement | Where waste is incinerated on site, the resulting ash shall be assessed and classified as hazardous or non-hazardous waste in accordance with applicable legal requirements. Laboratory testing shall be conducted where necessary. The ash shall be disposed of according to its classification, and relevant records shall be retained.                                                                                                                                                                                                                                                                          |

### 3.5.3.2 Soil and groundwater management

#### 3.5.3.2.1 For material suppliers

| No.  | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1012 | Requirement    | Risks of soil and groundwater contamination shall be adequately controlled.<br><br>Hazardous chemicals and wastes shall be stored to prevent releases; dosing units, tanks, and pipelines shall be leak-tight; wastewater ponds shall have intact liners; irrigation with untreated wastewater and uncontrolled discharges from sludge drying shall be prevented. Irrigation with treated wastewater shall only be considered as an exception when (i) the discharge limits corresponding to direct discharge are fully met, and (ii) a site-specific assessment and approval from local authorities is available.<br><br>Any leakage or incident shall be assessed and corrected without delay. |
| 1013 | Requirement    | Measures to prevent contamination of soil and groundwater by hazardous materials shall be installed and maintained.<br><br>A spill-prevention and emergency-response plan shall be implemented, and relevant personnel shall be trained. Spill kits or absorbents shall be available; storage areas shall have suitable secondary containment or berms; large tank farms shall use double-walled tanks with leak detection; and tanks, piping and WWTP installations shall undergo regular inspection and leak testing. Any spill or release shall be documented, investigated and appropriately contained and remediated, with necessary corrective actions implemented.                        |
| 1014 | Requirement    | Pipes, tanks, floors, and storage areas shall be properly maintained to prevent leaks and spills. Maintenance and inspection protocols shall be available and implemented for all relevant installations, including leak control and preventive actions. Floors in storage areas shall be solid, non-porous, and free of drains or cracks that could allow liquid infiltration, and there shall be no evidence of spilled liquids.                                                                                                                                                                                                                                                               |
| 1015 | Requirement    | Maintenance schedules shall be available and reviewed regularly. Internal inspections shall be conducted at defined intervals, at least monthly, and external maintenance activities shall follow documented schedules for tanks, vessels, floors, and pipelines.                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1016 | Requirement    | Third-party inspection certificates for storage tanks shall be available and up to date. Tanks containing solvents, flammable or toxic substances, or gases or liquids under pressure shall be inspected and certified by accredited external bodies. Inspection records shall confirm that tanks are free from corrosion, leaks, or structural defects.                                                                                                                                                                                                                                                                                                                                         |
| 1017 | Requirement    | Protocols and documentation for the checking of floorings and pipes shall be available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 1018 | Recommendation | Systematic and proactive measures should be implemented to minimize the risk of soil and groundwater contamination. A comprehensive storage and maintenance concept should integrate risk assessment, maintenance plans for pipes, tanks, and floors, and stormwater management, firefighting water retention. Stormwater systems should be kept separate from wastewater systems.                                                                                                                                                                                                                                                                                                               |

| No.  | Level          | Statement                                                                                             |
|------|----------------|-------------------------------------------------------------------------------------------------------|
| 1020 | Recommendation | Approach to reduce risk of soil and/or groundwater contamination should be part of management system. |

| No.  | Level          | Statement                                                                                                        |
|------|----------------|------------------------------------------------------------------------------------------------------------------|
| 1031 | Requirement    | If there are brownfields (polluted soil or groundwater), the company shall have a distinct plan for remediation. |
| 1036 | Recommendation | If there are no apparent brownfields, spot checks should be made to confirm there is no contamination.           |

| No.     | Level       | Statement                                                                                                                                                                                                                                                    |
|---------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | Where runoff (e.g. rainwater, other water flowing over or draining) from process areas has the potential to become contaminated, it shall be prevented as far as possible. Any runoff that cannot be prevented shall be collected and treated appropriately. |

### 3.5.4 Environmental noise

#### 3.5.4.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 981 | Requirement    | No obvious violations of legal or bluesign requirements with regard to noise shall be observed. (See: ???)                                                                                                                                                                                                                                                                                                                         |
| 983 | Requirement    | Neighborhood complaints shall be followed by appropriate improvements.                                                                                                                                                                                                                                                                                                                                                             |
| 984 | Requirement    | Single on-site measures shall be applied to reduce environmental noise. Examples include: <ul style="list-style-type: none"> <li>• closing exterior doors</li> <li>• switching off ventilators at night</li> <li>• restricting truck deliveries at night</li> <li>• installing anti-vibration pads in weaving areas</li> <li>• using stack silencers or mufflers (e.g., foam or rockwool) in ductwork with high airflow</li> </ul> |
| 985 | Recommendation | Active engineering controls should be deployed with a focus on covering complete areas rather than individual machines. Examples include: <ul style="list-style-type: none"> <li>• acoustic enclosures</li> <li>• inhousing and/or installing partitions</li> <li>• vibration isolation in zoned areas</li> </ul>                                                                                                                  |

### 3.5.5 Nature and biodiversity

#### 3.5.5.1 For material suppliers

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                            |
|---------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement    | The facility shall establish and maintain a biodiversity and ecosystems policy or include relevant commitments within its existing environmental policy. The policy shall be approved by management and include commitments to comply with applicable legal requirements, prevent or minimize adverse impacts on biodiversity and ecosystems arising from the facility's operations. |
| PENDING | Recommendation | The site should conduct a documented, location-specific screening of potential impacts on biodiversity and sensitive ecosystems. The screening should be informed by the <a href="#">TNFD LEAP</a> approach or an equivalent recognised methodology.                                                                                                                                 |
| PENDING | Recommendation | The screening should identify relevant environmental receptors, including protected areas, Key Biodiversity Areas, <a href="#">Ramsar Sites</a> , legally protected habitats, wetlands and receiving water bodies. It should assess whether the site's operations, including water withdrawal, wastewater discharge and other relevant activities, may affect these receptors.       |
| PENDING | Recommendation | The screening should consider relevant site pressures, including water withdrawal, wastewater discharge, chemical storage and handling, waste management, stormwater, accidental releases, air emissions and site expansion, where applicable.                                                                                                                                       |

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                            |
|---------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Recommendation | The site should assess and classify identified biodiversity risks as low, medium or high, considering the sensitivity of relevant ecosystems and the nature, scale and likelihood of potential impacts.                                                                                                                                              |
| PENDING | Recommendation | Where a high biodiversity risk is identified, the site should implement and periodically review a site-specific action plan. The plan should prioritise avoidance and reduction of impacts and define control measures, responsibilities, timelines and review arrangements.                                                                         |
| PENDING | Recommendation | Where a medium biodiversity risk is identified, the site should implement and periodically review a site-specific action plan. The screening and any related action plan should be updated following significant changes to site operations, water withdrawal, wastewater discharge, chemical use, land use or surrounding environmental conditions. |
| PENDING | Recommendation | Where appropriate, the site should implement measures that support local ecosystems and engage relevant authorities, water managers or other stakeholders. Restoration or regenerative measures should be applied after prioritising the avoidance and reduction of impacts, in line with the <a href="#">SBTN AR3T</a> action framework.            |

## 3.6 Occupational health and safety

### 3.6.1 Occupational health management and training

#### 3.6.1.1 For material suppliers

| No.  | Level          | Statement                                                                                                                                                                                                                                |
|------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1104 | Requirement    | Legal requirements shall be met.                                                                                                                                                                                                         |
| 1105 | Requirement    | All severe incidents and accidents related to occupational health and safety in the last 3 years shall be followed-up by effective corrective actions. Records and statistics of all near misses, incidents and accidents shall be kept. |
| 1106 | Requirement    | Occupational health responsibilities shall be clearly defined.                                                                                                                                                                           |
| 1108 | Requirement    | Operation and safety instructions (including safety pictograms) shall be available at the workplaces.                                                                                                                                    |
| 1109 | Requirement    | Necessary <a href="#">PPE</a> for protection against technical and chemical hazards shall be available, in good condition, and used in actual operations.                                                                                |
| 1113 | Recommendation | A zero-incidents objective should be defined.                                                                                                                                                                                            |
| 1114 | Recommendation | A regular management review of occupational health statistics should be conducted at least annually.                                                                                                                                     |

| No.     | Level          | Statement                                                                                                                                                                                                              |
|---------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1115    | Requirement    | Investments in occupational health equipment shall be made as needed to protect worker health.                                                                                                                         |
| 1116    | Recommendation | There should be a proactive approach to occupational health by following the 'STOP principle' (Substitution, Technical measures, Organisational measures, <a href="#">PPE</a> ) in a systematic and documented manner. |
| PENDING | Recommendation | Employer should ensure that pre-employment health assessments are carried out to evaluate workers' fitness for their specific roles.                                                                                   |
| PENDING | Recommendation | Employer should implement routine health monitoring for workers who are exposed to specific occupational health risks, such as chemicals, excessive noise, or physically demanding tasks.                              |
| PENDING | Recommendation | Manual lifting of heavy loads should be avoided wherever possible by utilizing appropriate mechanical handling equipment or team lifting techniques to prevent musculoskeletal injuries.                               |

| No.  | Level       | Statement                                                                                                                                                                 |
|------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1127 | Requirement | Occupational health trainings shall be conducted as onboarding for new employees and refresher trainings shall be provided on a regular basis.                            |
| 1128 | Requirement | Trainings regarding the handling of hazardous materials shall be conducted as onboarding for new employees, and refresher trainings shall be provided on a regular basis. |
| 1129 | Requirement | Required competence and training needs for different workplaces shall be clearly defined.                                                                                 |

| No.     | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1130    | Requirement    | On-site contractors shall be trained for basic occupational health and safety rules.                                                                                                                                                                                                                                                                                                                                    |
| 1134    | Requirement    | Employees shall demonstrate the required knowledge regarding workplace hazards and risks.                                                                                                                                                                                                                                                                                                                               |
| 1135    | Recommendation | In addition to general occupational health and safety training, critical and relevant safety topics should be addressed through specific trainings or workshops.                                                                                                                                                                                                                                                        |
| 1138    | Recommendation | Training program and training success should be subject to regular management review to ensure it is up-to-date and effective. Training success should be verified (e.g. via a test).                                                                                                                                                                                                                                   |
| PENDING | Requirement    | Where ionizing radiation sources or radiation-generating equipment (e.g. beta gauges or XRF analyzers) are used in production or quality control, a competent person responsible for radiation safety shall be appointed. Documented evidence of training appropriate to the equipment and radiation risks shall be available, together with any certification or regulatory approval required by national legislation. |
| PENDING | Recommendation | If Class 3 or Class 4 lasers are to be used in production, a competent laser safety officer (LSO) should be appointed and LSO certificate shall be presented.                                                                                                                                                                                                                                                           |

## 3.6.2 Workplace atmosphere, noise and protection

### 3.6.2.1 For material suppliers

| No.  | Level       | Statement                                                                                                                                                                                                                                                                         |
|------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1103 | Requirement | Generally accepted occupational health rules shall be followed. Unnecessary worker exposure to hazardous chemicals and process emissions shall be avoided. Where needed, suitable engineering controls, such as closed systems or local exhaust ventilation (LEV), shall be used. |
| 1121 | Requirement | There shall be sufficient lighting in work areas to ensure the safe performance of production activities.                                                                                                                                                                         |
| 1122 | Requirement | Safety equipment and installations shall be regularly checked and well maintained.                                                                                                                                                                                                |
| 1123 | Requirement | Appropriate ventilation systems shall be installed in production areas where high exposure potential exists.                                                                                                                                                                      |

| No.  | Level          | Statement                                                                                                                                         |
|------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 1142 | Requirement    | Applicable workplace atmosphere measurements shall be available, and compliance with local occupational exposure limits shall be maintained.      |
| 1143 | Requirement    | Conformance with the bluesign occupational exposure limits shall be maintained. (See: <a href="#">Occupational exposure limits (OELs) [66]</a> ). |
| 1144 | Recommendation | A systematic monitoring program should be in place.                                                                                               |

| No.  | Level       | Statement                                                                                                                                                                                                                         |
|------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1152 | Requirement | Personal hearing protection shall be <ul style="list-style-type: none"> <li>made available for areas exceeding a noise level of 80 dB(A), and</li> <li>mandatory to wear in areas exceeding a noise level of 85 dB(A).</li> </ul> |
| 1153 | Requirement | The company shall create and maintain a documented plant noise mapping register. Noise areas shall be marked in the plan and at the actual locations. Worker exposure tracking shall be maintained.                               |
| 1154 | Requirement | Personal hearing protection shall be used properly.                                                                                                                                                                               |

| No.     | Level       | Statement                                                                          |
|---------|-------------|------------------------------------------------------------------------------------|
| 1165    | Requirement | Workers shall not be exposed to heat/cold stress.                                  |
| PENDING | Requirement | Access to drinking water and sanitary facilities shall be ensured.                 |
| 1170    | Requirement | The quality of drinking water shall comply with national, local, or WHO standards. |
| 1172    | Requirement | Working places in production and offices shall show appropriate ergonomics.        |

### 3.6.2.1.1 For the process: Consumer product manufacturing

| No.     | Level       | Statement                                                                                                                                                                                                                                                |
|---------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | If exposure of the human eye to harmful laser radiation cannot be excluded (e.g. by an enclosure), suitable eye protection for the specific type of laser shall be used for every person in the area concerned. Unauthorized access shall be restricted. |

## 3.6.3 Safety management

### 3.6.3.1 Management of handling and storage hazardous materials

#### 3.6.3.1.1 For material suppliers

| No. | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 511 | Requirement    | Company shall have an up-to-date complete inventory that includes at least the following: <ul style="list-style-type: none"> <li>• Chemical name</li> <li>• Supplier name and address</li> <li>• Stored quantity</li> <li>• Storage location</li> <li>• <i>GHS</i> classification, H statements and pictograms</li> <li>• UN dangerous goods classification and pictograms</li> <li>• <i>PPE</i> instruction</li> </ul> |
| 513 | Requirement    | Information about hazardous properties and safe handling of chemicals shall be available to all relevant departments, and shall be used for risk assessments where relevant (e.g. in <i>product stewardship</i> , emergency preparedness, environment, <i>OHS</i> ).                                                                                                                                                    |
| 514 | Recommendation | A central database (not only in Excel) for information regarding hazardous properties and handling precautions of chemicals should be available to relevant personnel.                                                                                                                                                                                                                                                  |

| No. | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 532 | Requirement | Long-chain <i>PFAS</i> (C8) shall not be used or stored at the production site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 550 | Requirement | Reactive hotmelts shall be used with the following pre-conditions: <ol style="list-style-type: none"> <li>1. Content of free isocyanates below 5%</li> <li>2. Closed dosing system</li> <li>3. Sufficient <i>LEV</i> at application area</li> <li>4. <i>SOP</i> for roller cleaning</li> <li>5. Suitable work clothing, including spare clothing (in case of hotmelt contamination, clothing shall be changed immediately)</li> <li>6. Sufficient <i>PPE</i></li> <li>7. Specific worker training</li> <li>8. Supplier application recommendations available and followed</li> <li>9. Regular glue temperature measurements during the process</li> <li>10. Manual application shall be prohibited with the exception of trials. In this case, sufficient safety precautions shall be present, i.e. suitable respiratory protection with organic vapor filters (A/B) shall be used.</li> </ol> |
| 553 | Requirement | Tetrachloroethylene (C <sub>2</sub> Cl <sub>4</sub> ) shall only be used for solvent scouring with the following pre-conditions: <ol style="list-style-type: none"> <li>1. Closed loop installation</li> <li>2. Management: <i>SOP</i>, <i>VOC</i> balance, maintenance by qualified expert, worker training, documented leak checks</li> <li>3. Storage: solvent-resistant floor (certified), secondary containment</li> <li>4. <i>OHS</i>: C<sub>2</sub>Cl<sub>4</sub> sensor, maintenance by qualified expert, workplace measurements</li> <li>5. Off-gas control: no direct heating systems, documented emission factor (kg C<sub>2</sub>Cl<sub>4</sub>/kg textile)</li> <li>6. Wastewater: no contamination of cooling water, AOX monitoring, disposal by licensed third party;</li> <li>7. Waste: disposal by licensed third party</li> </ol>                                            |

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                                    |
|---------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | For activities involving respirable crystalline silica (e.g., sandblasting), exposure shall be minimized through substitution, enclosure, local exhaust ventilation, wet processing, and other appropriate engineering controls. Worker exposure shall be assessed and controlled in accordance with GefStoffV and TRGS 559. |

| No.  | Level          | Statement                                                                                                                                                                                                                                                                     |
|------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1202 | Requirement    | Hazardous materials shall be handled and stored correctly.                                                                                                                                                                                                                    |
| 1203 | Requirement    | SDS/Safety instruction especially for all hazardous materials shall be available.                                                                                                                                                                                             |
| 1204 | Requirement    | Legal requirements for handling and storage of hazardous materials shall be met.                                                                                                                                                                                              |
| 1205 | Requirement    | All severe incidents related to handling and storage of hazardous materials in the last 3 years shall be followed up by effective corrective actions, or there shall have been no severe incidents during this period. Records and statistics on all incidents shall be kept. |
| 1206 | Requirement    | Hazard information for materials and chemicals shall be systematically collected and used for risk assessments (e.g., worker safety and environmental risk assessments).                                                                                                      |
| 1209 | Requirement    | Access to fatal, toxic, and <i>CMR</i> chemicals shall be restricted to authorized persons only.                                                                                                                                                                              |
| 1213 | Recommendation | Handling and storage of hazardous materials should be part of the management system, subject to continual improvement process and to regular management reviews.                                                                                                              |

| No.  | Level       | Statement                                                                                                                              |
|------|-------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 1215 | Requirement | A consistent system for labelling (GHS labelling or equivalent local labelling) of chemical hazards shall be applied.                  |
| 1216 | Requirement | Rules for the storage of incompatible chemicals shall be documented, communicated to relevant personnel, and consistently implemented. |
| 1217 | Requirement | Detailed records for storage, application and destruction of cyanides shall be available.                                              |

### 3.6.3.2 Operations and equipment safety

#### 3.6.3.2.1 For material suppliers

| No.     | Level       | Statement                                                                                                                                                              |
|---------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1162    | Requirement | Electrical installations shall be adequately protected and free from readily obvious safety hazards.                                                                   |
| 1163    | Requirement | There shall be no obvious hazards of electrostatic discharge from processes.                                                                                           |
| 1164    | Requirement | There shall be no obvious hazards from unprotected rotating machine parts, sharp edges or hot surfaces.                                                                |
| 1166    | Requirement | There shall be no obvious fall hazards.                                                                                                                                |
| 1167    | Requirement | Forklift trucks shall be operated safely and the forklift drivers shall have appropriate training and driving licence.                                                 |
| 1168    | Requirement | There shall be no hazards resulting from improper stacking or unsecured loads.                                                                                         |
| PENDING | Requirement | Equipment at forklift battery charging stations shall be well maintained, and charging areas shall be equipped with acid containments and readily available spill kit. |

| No.  | Level          | Statement                                                                                                                     |
|------|----------------|-------------------------------------------------------------------------------------------------------------------------------|
| 1222 | Requirement    | Equipment shall be well maintained.                                                                                           |
| 1223 | Requirement    | Control devices and instruments shall be in good order.                                                                       |
| 1224 | Requirement    | There shall be appropriate containments for stored liquid chemicals.                                                          |
| 1225 | Requirement    | Appropriate spill kits shall be available.                                                                                    |
| 1226 | Requirement    | Storage areas shall be properly marked and maintained.                                                                        |
| 1227 | Requirement    | Pipes shall be clearly marked with content (color code possible) and flow direction.                                          |
| 1228 | Requirement    | Containers/tanks for hazardous chemicals shall be correctly labelled according to GHS rules or local equivalent requirements. |
| 1231 | Recommendation | Filling /dosing should be at least partly automated and/or other measures to reduce operational risk should be installed.     |

| No.  | Level       | Statement                                                                                                 |
|------|-------------|-----------------------------------------------------------------------------------------------------------|
| 1234 | Requirement | For <a href="#">VOC</a> relevant sites, vapor recovery systems for tanks and reactors shall be installed. |

## 3.7 Emergency preparedness

### 3.7.1 Management of emergency preparedness

#### 3.7.1.1 For material suppliers

| No.  | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1303 | Requirement    | Sufficient emergency facilities shall be available for significant risks (technical, chemical, natural), based on the conducted risk assessments.                                                                                                                                                                                                                                                                                                                                 |
| 1304 | Requirement    | Valid documentation demonstrating compliance with applicable legal requirements for building permits, as well as records confirming the availability and adequacy of emergency equipment.                                                                                                                                                                                                                                                                                         |
| 1305 | Requirement    | Responsibilities for emergency preparedness shall be clearly defined and a written procedure shall be available.                                                                                                                                                                                                                                                                                                                                                                  |
| 1307 | Requirement    | Systematic approach for emergency preparedness based on evaluation of risks shall be in place. Risk assessments shall be available.                                                                                                                                                                                                                                                                                                                                               |
| 1308 | Requirement    | Persons responsible for emergency preparedness shall be named, well educated and trained.                                                                                                                                                                                                                                                                                                                                                                                         |
| 1309 | Requirement    | Emergency preparedness plan (including alarm plan with phone numbers of internal and external responsible persons) shall be available.                                                                                                                                                                                                                                                                                                                                            |
| 1310 | Requirement    | Regular trainings and/or drills on emergency preparedness shall be conducted and well documented.                                                                                                                                                                                                                                                                                                                                                                                 |
| 1311 | Requirement    | Emergency instructions shall include sufficient and consistent pictograms (See: <a href="#">Technical Guidance</a> on Workplace safety signs).                                                                                                                                                                                                                                                                                                                                    |
| 1312 | Requirement    | Emergency devices shall be installed in appropriate locations and maintained in good working condition. Examples include the following placed in close proximity to work or storage areas: suitable fire extinguishers, exit signs, emergency lights, and spill kits and eye showers where applicable.<br><br>If necessary, additional devices for preventing spills from entering the rainwater system shall be made available (e.g. covers for storm drain hatches and sewers). |
| 1314 | Recommendation | Employees and workers should be actively involved in planning emergency preparedness and response. This can be achieved through mechanisms such as safety committees, interviews, regular meetings, and feedback protocols.                                                                                                                                                                                                                                                       |
| 1315 | Recommendation | A zero-incident objective should be defined as a long-term target (e.g., annual), including measures such as monthly rewarding programs.                                                                                                                                                                                                                                                                                                                                          |

| No.  | Level          | Statement                                                                                                                                                                                                                                                                                                           |
|------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1317 | Recommendation | Emergency preparedness should be subject to an annual management review that includes issues and improvements.                                                                                                                                                                                                      |
| 1318 | Recommendation | A high standard of emergency preparedness should be ensured through a comprehensive approach, including periodic risk assessments, internal or external audits, and the development of emergency and evacuation procedures, in coordination with relevant external experts and local authorities where appropriate. |
| 1319 | Recommendation | Emergency preparedness should be part of a certified <a href="#">OHS</a> management system and should be visible within the company.                                                                                                                                                                                |

### 3.7.1.1.1 For the process: Converting

| No.     | Level       | Statement                                                                                                                                                                                                                                                                                                |
|---------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | Legal requirements regarding emergency preparedness shall be fully met.                                                                                                                                                                                                                                  |
|         |             | For sites with business processes only: Fire inspection report of the office location shall be available.                                                                                                                                                                                                |
|         |             | For sites with lab(s) and/or warehouse(s): Basic emergency preparedness measures shall be in place and appropriately implemented. These measures shall include evacuation plan, first aid equipment, clearly marked emergency routes and exits, fire-fighting equipment and regular emergency trainings. |

## 3.7.2 Fire safety, evacuation and major accident hazards

### 3.7.2.1 For material suppliers

| No.  | Level       | Statement                                                                                                                                        |
|------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 1313 | Requirement | Company shall have emergency preparedness plans in place for severe accidents which is in agreement with the local authorities and neighborhood. |

| No.  | Level          | Statement                                                                                                                                                                                                                                                                                  |
|------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1320 | Requirement    | Buildings, staircases, work areas and floors shall be clearly referenced and marked.                                                                                                                                                                                                       |
| 1326 | Requirement    | Fire extinguishers shall be installed throughout the site and be distributed so that the time necessary to reach them and walk back to the fire does not allow the fire to get out of control (e.g. the distance for class A and class D extinguishers shall not exceed around 20 meters). |
| 1327 | Requirement    | Regular maintenance of firefighting equipment shall take place in accordance with local regulations. This includes maintenance of portable extinguishers, sprinkler systems, hydrant systems, hoses, CO <sub>2</sub> extinguishing systems, and fire alarm systems.                        |
| 1328 | Requirement    | Regular trainings on the use of firefighting equipment shall be conducted, as needed based on legal requirements and performed risk assessment.                                                                                                                                            |
| 1329 | Requirement    | Smoke detectors shall be installed in office, production and storage areas.                                                                                                                                                                                                                |
| 1330 | Recommendation | Fire hoses should be available.                                                                                                                                                                                                                                                            |

| No.  | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                       |
|------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1331 | Requirement    | Zones with potentially explosive atmospheres shall be identified according to <a href="#">ATEX</a> zoning. Precautions include using only suitable certified equipment and machinery (e.g. identified by suitable labels, pictograms and codes), as well as measures such as ventilation, separation, use of explosion-protected installations, and control of static discharge with grounding. |
| 1332 | Recommendation | Additional sensors (e.g. heat sensors, <a href="#">VOC</a> concentration sensors) should be installed.                                                                                                                                                                                                                                                                                          |
| 1333 | Recommendation | Automatic extinguishing devices (e.g. sprinkler systems) should be installed.                                                                                                                                                                                                                                                                                                                   |
| 1334 | Recommendation | Specially trained and equipped firefighting teams should be available.                                                                                                                                                                                                                                                                                                                          |
| 1335 | Recommendation | A detailed assessment of fire loads fire sections and corresponding specific precautions should be available.                                                                                                                                                                                                                                                                                   |

| No.  | Level       | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1341 | Requirement | Appropriate evacuation plans shall be prepared in accordance with recognized standards, such as ISO 23601, and applicable national requirements. The plans shall use safety signs that comply with ISO 7010 or applicable national standards. They shall clearly indicate the viewer's location, emergency routes and exits, emergency equipment and assembly points. The plans shall also include a site overview showing the relevant buildings, surrounding area and location of the assembly point. |
| 1342 | Requirement | Evacuation routes and exits shall be clearly marked with signal markings (e.g., arrows and routes), remain unlocked, and be free of obstacles. Emergency exits shall be equipped with push bars to allow quick and safe evacuation.                                                                                                                                                                                                                                                                     |
| 1343 | Requirement | An emergency light system shall be installed to enable safe evacuation under low light conditions. Emergency exit signs shall be illuminated, and emergency routes and exits shall be clearly visible in every corner of the production site.                                                                                                                                                                                                                                                           |

| No.  | Level          | Statement                                                                   |
|------|----------------|-----------------------------------------------------------------------------|
| 1345 | Requirement    | A procedure for counting people in case of evacuation shall be established. |
| 1346 | Recommendation | Panic-proof emergency exits should be installed where necessary.            |

| No.  | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1351 | Requirement    | A sufficient number of employees shall be trained as first aiders in accordance with applicable local legal requirements. Where no specific legal requirement exists, a minimum of 5% of employees shall be trained.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 1352 | Requirement    | First aid kits shall be available in sufficient number, accessible in each relevant department, and maintained in usable condition. Each kit shall contain essential first aid supplies, including at minimum: wound dressings (e.g. bandages, sterile gauze), adhesive plasters, antiseptic materials, absorbent dressings, protective gloves, scissors, tweezers, triangular bandages, safety pins, and a first aid instruction guide or emergency contact information.<br><br>Each first aid kit shall be clearly marked as "FIRST AID", indicate the responsible person, be of adequate size to hold all contents, and ensure proper storage conditions (clean, dry, and dustproof), and be readily available to all workers. |
| 1353 | Requirement    | Organizational measures shall be applied to ensure that first aiders are always present and that different shifts are covered.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1354 | Requirement    | Functioning eye-/emergency showers shall be available in areas where hazardous chemicals are handled.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 1355 | Recommendation | Availability of medical equipment should exceed necessary requirements based on regulations and risk assessment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 1356 | Recommendation | Medical staff should be available (internal or external).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 1357 | Recommendation | A dedicated medical room should be available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

| No.  | Level          | Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1363 | Requirement    | Measures shall be installed to eliminate or minimize the risk of major-accident hazards. Regarding the classification of sites: Threshold values from the EU directive 2012/18/EU or local related regulations for the maximum allowable amounts of hazardous substances present on site shall be observed.                                                                                                                                                                                                          |
| 1364 | Requirement    | Risk assessment for major-accident hazards shall be conducted and reviewed regularly including the impact on the surrounding environment and the local community. The following risks shall be covered: <ul style="list-style-type: none"> <li>• Operation related hazards (e.g. fires, explosions, spills)</li> <li>• Natural hazards which can trigger or intensify major accidents (e.g. flooding, landslides, droughts)</li> <li>• Intentional hazards caused by unauthorized persons (e.g. sabotage)</li> </ul> |
| 1365 | Requirement    | Emergency preparedness plan shall reflect major-accident hazards and targeted at minimizing the impact on the surrounding environment and the local community.                                                                                                                                                                                                                                                                                                                                                       |
| 1366 | Recommendation | Emergency preparedness plan should be agreed with the local community and fire department.                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 1367 | Recommendation | Special alarm routines should be established together with the local fire department.                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1368 | Recommendation | Trainings for major-accidents hazards should be conducted which include the local community.                                                                                                                                                                                                                                                                                                                                                                                                                         |

| No.     | Level          | Statement                                                                                                                    |
|---------|----------------|------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement    | Halon in fire extinguishers shall be phased out (unless specifically required by local legislation in special applications). |
| PENDING | Recommendation | Information on stored chemicals and amounts should be made available to the local fire brigade.                              |

## 3.8 Supply chain assurance

### 3.8.1 Transaction management

#### 3.8.1.1 For the process: Converting

| No.     | Level       | Requirement                                                                                                                                                                                                                                                             |
|---------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | Procedure on bluesign order management shall be defined to ensure consistent documentation trail for entire transaction flow from purchase to sales of registered articles is maintained on lot basis.                                                                  |
| PENDING | Requirement | Unique identifier (e.g. bluesign article code/GUIDE ID) shall be available and traceable on necessary transaction documentations.                                                                                                                                       |
| PENDING | Requirement | The System Partner shall manage all sourcing activities of bluesign orders to ensure full traceability to the original manufacturer. All transactions shall be traceable by the System Partner.                                                                         |
| PENDING | Requirement | In transaction flow where an affiliate/subsidiary entity is involved in sourcing and/or distribution activities of bluesign orders, its role shall be clearly defined and documented, and all bluesign transactions shall be centrally traceable by the System Partner. |
| PENDING | Requirement | In transaction flow where an intermediary trader is involved in distribution activities of bluesign orders, its role shall be clearly defined and documented. A service agreement between the System Partner and intermediary trader shall be available.                |

### 3.8.2 Data integrity

#### 3.8.2.1 For the process: Converting

| No.     | Level       | Requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PENDING | Requirement | Converting consent from original manufacturer shall be available and maintained by the System Partner for registered articles.                                                                                                                                                                                                                                                                                                                                                                                                                |
| PENDING | Requirement | The System Partner shall ensure the integrity and authenticity of all purchasing sources and demonstrate that registered articles are sourced exclusively from original bluesign manufacturers.                                                                                                                                                                                                                                                                                                                                               |
| PENDING | Requirement | The System Partner shall have valid Guide ID registered in bluesign Guide prior to purchase of registered article.                                                                                                                                                                                                                                                                                                                                                                                                                            |
| PENDING | Requirement | Volume reconciliation of registered articles: The System Partner shall demonstrate that the purchased amounts of registered articles at the original manufacturer conform to the volume of registered articles sold by the converting System Partner.<br><br>In cases where flow of goods involves different units of measure (e.g. yard of fabric to units of finished products), conversion shall adhere to technically justifiable mass balance principles. Any discrepancy or loss rate must remain within industrial standard tolerance. |

## 3.9 Annex: Tables

### 3.9.1 For material suppliers

#### 3.9.1.1 Product stewardship

##### 3.9.1.1.1 For the process: Down and feather manufacturing

###### 3.9.1.1.1.1 Environment

###### 3.9.1.1.1.1.1 Requirements for down and feather

**Table 4. Requirements for down and feather**

| Description                                                              | Requirement                                   | Goal | Test method |
|--------------------------------------------------------------------------|-----------------------------------------------|------|-------------|
| Oxygen index number                                                      | max. 20                                       | < 10 | BS EN 1162  |
| Oil and fat content                                                      | 0.5 to 2 %                                    | N/A  | BS EN 1163  |
| Turbidity                                                                | min. 300 mm                                   | N/A  | BS EN 1164  |
| pH                                                                       | 6.6 to 8.0                                    | N/A  | BS EN 1413  |
| <b>Microbiological state (required if oxygen index number is &gt;20)</b> |                                               |      |             |
| Mesophilic aerobic bacteria content                                      | less than 10 <sup>6</sup> CFU <sup>a</sup> /g | N/A  | BS EN 1884  |
| Faecal streptococci count                                                | less than 10 <sup>2</sup> CFU/g               | N/A  |             |
| Sulfite reducing clostridium count                                       | less than 10 <sup>2</sup> CFU/g               | N/A  |             |
| Presence of salmonella                                                   | absent in 20 g                                | N/A  |             |

<sup>a</sup>colony-forming unit

### 3.9.1.2 Environment

#### 3.9.1.2.1 Wastewater

##### 3.9.1.2.1.1 Direct wastewater discharge



#### PRE-CONDITION

Applicable for material suppliers engaging in textile manufacturing with a wastewater volume >5 m<sup>3</sup>/day. For sites with a smaller wastewater volume, an individual approach is adapted to the bluesign System Partner's processes.

**Table 5. bluesign limit values for direct discharge to aquatic body<sup>a</sup>.**

| Parameter        | Unit       | Requirement - Limit value | Recommendation - Limit value | Measuring/ Sampling interval treated WW |
|------------------|------------|---------------------------|------------------------------|-----------------------------------------|
| Persistent foam  | -          | Shall not be visible      | Shall not be visible         | daily                                   |
| pH               | -          | 6-9                       | 6-9                          | continually                             |
| Temperature      | °C         | Δ15° or max. 40° C        | Δ10° or 37° C                | continually                             |
| COD              | mg/L       | 150                       | 80                           | continually                             |
| BOD <sub>5</sub> | mg/L       | 30                        | 15                           | weekly                                  |
| TSS              | mg/L       | 50                        | 15                           | daily                                   |
| Dissolved Oxygen | mg/L       | ≥4                        | ≥4                           | continually                             |
| E.Coli           | MPN/100-ml | 126                       | 126                          | 6 months                                |

| Parameter                                        | Unit                 | Requirement - Limit value | Recommendation - Limit value | Measuring/ Sampling interval treated WW |
|--------------------------------------------------|----------------------|---------------------------|------------------------------|-----------------------------------------|
| Color                                            | m <sup>-1</sup>      | 7 (436 nm; yellow)        | 5 (436 nm; yellow)           | daily                                   |
|                                                  |                      | 5 (525 nm; red)           | 3 (525 nm; red)              |                                         |
|                                                  |                      | 3 (620 nm; blue)          | 2 (620 nm; blue)             |                                         |
| Ammonium nitrogen (NH <sub>4</sub> -N)           | mg/L                 | 5                         | 1                            | weekly                                  |
| Nitrogen (total)                                 | mg/L                 | 20                        | 10                           | weekly                                  |
| Phosphorous (total)                              | mg/L                 | 3                         | 0.5                          | 6 months                                |
| Total Chlorine                                   | mg/L                 | 1                         | 1                            | 6 months                                |
| AOX                                              | mg/L                 | 2                         | 0.5                          | 6 months                                |
| Sulfite                                          | mg/L                 | 2                         | 0.5                          | 6 months                                |
| Sulfide                                          | mg/L                 | 0.5                       | 0.05                         | 6 months                                |
| Oil and grease                                   | mg/L                 | 10                        | 2                            | 6 months                                |
| Phenol                                           | mg/L                 | 0.5                       | 0.01                         | 6 months                                |
| Cyanide                                          | mg/L                 | 0.2                       | 0.1                          | 6 months                                |
| APEO (NPEO, OPEO, NP and OP) <sup>b</sup>        | µg/L                 | 5                         | 5                            | 6 months                                |
| Microplastic (for particles ≥50 µm) <sup>c</sup> | polymer particles /L | < 500                     | < 100                        | 6 months                                |
| <b>Metals</b>                                    |                      |                           |                              |                                         |
| Antimony                                         | mg/L                 | 0.1                       | 0.05                         | 6 months                                |
| Arsenic                                          | mg/L                 | 0.05                      | 0.01                         | 6 months                                |
| Cadmium                                          | mg/L                 | 0.1                       | 0.05                         | 6 months                                |
| Chromium (total)                                 | mg/L                 | 0.2                       | 0.1                          | 6 months                                |
| Chromium (VI)                                    | mg/L                 | 0.05                      | 0.005                        | 6 months                                |
| Cobalt                                           | mg/L                 | 0.05                      | 0.02                         | 6 months                                |
| Copper                                           | mg/L                 | 1                         | 0.5                          | 6 months                                |
| Lead                                             | mg/L                 | 0.1                       | 0.05                         | 6 months                                |
| Mercury                                          | mg/L                 | 0.01                      | 0.005                        | 6 months                                |
| Nickel                                           | mg/L                 | 0.2                       | 0.1                          | 6 months                                |
| Silver                                           | mg/L                 | 0.1                       | 0.05                         | 6 months                                |
| Tin                                              | mg/L                 | 2                         | 1.5                          | 6 months                                |
| Zinc                                             | mg/L                 | 5                         | 1                            | 6 months                                |

<sup>a</sup>The parameters and the values are aligned with the industry standards, including ZDHC Wastewater & Sludge Guidelines. Testing methods may be applied in accordance with the same guidelines.

<sup>b</sup>To be measured in the raw/untreated wastewater

<sup>c</sup>using ISO 16094-2 method

### 3.9.1.2.1.2 Aquatic ecotoxicity requirements for direct discharge

**Table 6. Aquatic ecotoxicity requirements for direct discharge**

| Test              | Standard method(s)          | Requirement - Limit                            |
|-------------------|-----------------------------|------------------------------------------------|
| Fish egg toxicity | OECD Test Guideline No. 236 | No observed toxicity at a dilution factor of 6 |
|                   | ISO 15088:2007              |                                                |
|                   | HJ1069-2019                 |                                                |
| Daphnia toxicity  | OECD Test Guideline 202     | No observed toxicity at a dilution factor of 8 |
|                   | ISO 6341:2012               |                                                |
|                   | EPA Method 2002.0 / 2021    |                                                |

| Test               | Standard method(s)      | Requirement - Limit                             |
|--------------------|-------------------------|-------------------------------------------------|
|                    | OECD Test Guideline 202 |                                                 |
| Algae toxicity     | ISO 8692:2012           | No observed toxicity at a dilution factor of 16 |
|                    | EPA OCSPP 850.5400      |                                                 |
| Bacterial toxicity | ISO 11348               | No observed toxicity at a dilution factor of 32 |

### 3.9.1.2.1.3 Indirect wastewater discharge



#### PRE-CONDITION

Applicable for material suppliers engaging in textile manufacturing with a wastewater volume >5 m<sup>3</sup>/day. For sites with a smaller wastewater volume, an individual approach is adapted to the bluesign System Partner's processes.

**Table 7. bluesign limit values for indirect discharge to third party WWTP**

| Parameter                       | Unit | Requirement - Limit Value | Measuring/Sampling interval |
|---------------------------------|------|---------------------------|-----------------------------|
| APEO (NPEO, OPEO, NP and OP) ** | µg/L | 5                         | 6 months                    |
| <b>Metals</b>                   |      |                           |                             |
| Antimony                        | mg/L | 0.1                       | 6 months                    |
| Arsenic                         | mg/L | 0.05                      | 6 months                    |
| Cadmium                         | mg/L | 0.1                       | 6 months                    |
| Chromium (total)                | mg/L | 0.2                       | 6 months                    |
| Chromium (VI)                   | mg/L | 0.05                      | 6 months                    |
| Cobalt                          | mg/L | 0.05                      | 6 months                    |
| Copper                          | mg/L | 1                         | 6 months                    |
| Lead                            | mg/L | 0.1                       | 6 months                    |
| Mercury                         | mg/L | 0.01                      | 6 months                    |
| Nickel                          | mg/L | 0.2                       | 6 months                    |
| Silver                          | mg/L | 0.1                       | 6 months                    |
| Tin                             | mg/L | 2                         | 6 months                    |
| Zinc                            | mg/L | 5                         | 6 months                    |

### 3.9.1.2.1.4 Limit values for sludge testing

**Table 8. bluesign limit values for sludge testing<sup>a</sup>.**

| Parameter/Substance          | Threshold value <sup>b</sup><br>(mg/kg -Dry weight) | Leachate limit value<br>(mg/L) | Requirement - Maximum<br>limit value in sludge |
|------------------------------|-----------------------------------------------------|--------------------------------|------------------------------------------------|
| APEO (NPEO, OPEO, NP and OP) | -                                                   | -                              | 0.4 mg/kg-Dry weight                           |
| Cyanide                      | -                                                   | -                              | 70 mg/kg-Dry weight                            |
| pH                           | -                                                   | -                              | 6.5-9 s.u.                                     |
| Paint Filter Test            | -                                                   | -                              | Pass/Fail                                      |
| Fecal Coliform               | -                                                   | -                              | <1000 MPN/g                                    |
| <b>Metals</b>                |                                                     |                                |                                                |
| Antimony                     | 12                                                  | 0.6                            | N/A                                            |
| Arsenic                      | 10                                                  | 0.5                            | 41 mg/kg                                       |
| Barium                       | 700                                                 | 35                             | 500 mg/kg                                      |

| Parameter/Substance | Threshold value <sup>b</sup><br>(mg/kg -Dry weight) | Leachate limit value<br>(mg/L) | Requirement - Maximum<br>limit value in sludge |
|---------------------|-----------------------------------------------------|--------------------------------|------------------------------------------------|
| Cadmium             | 3                                                   | 0.15                           | 39 mg/kg                                       |
| Chromium (total)    | 100                                                 | 5                              | 1200 mg/kg                                     |
| Chromium (VI)       | 50                                                  | 2.5                            | 50 mg/kg                                       |
| Cobalt              | 1600                                                | 80                             | N/A                                            |
| Copper              | 200                                                 | 10                             | 1500 mg/kg                                     |
| Lead                | 10                                                  | 0.5                            | 400 mg/kg                                      |
| Mercury             | 1                                                   | 0.5                            | 17 mg/kg                                       |
| Nickel              | 70                                                  | 3.5                            | 420 mg/kg                                      |
| Silver              | 100                                                 | 5                              | N/A                                            |
| Selenium            | 10                                                  | 0.5                            | 36 mg/kg                                       |
| Zinc                | 1000                                                | 50                             | 2800 mg/kg                                     |

<sup>a</sup>The parameters and the values are aligned with the industry standards, including ZDHC Wastewater & Sludge Guidelines.

<sup>b</sup>If threshold value is exceeded, leachate shall be tested.

### 3.9.1.2.1.5 Substance limit values for untreated wastewater

The parameters and the values are aligned with the industry standards, including ZDHC Wastewater & Sludge Guidelines. Testing methods may be applied in accordance with the same guidelines.

**Table 9. Substance limit values for untreated wastewater - Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs)**

| Substance / Parameter           | CAS No.     | Requirement -<br>Limit value (µg/L) |
|---------------------------------|-------------|-------------------------------------|
| Nonylphenol (NP), mixed isomers | 104-40-5    | 5                                   |
|                                 | 11066-49-2  |                                     |
|                                 | 25154-52-3  |                                     |
|                                 | 84852-15-3  |                                     |
|                                 | Several     |                                     |
| Nonylphenol ethoxylates (NPEO)  | 127087-87-0 | 5                                   |
|                                 | 26027-38-3  |                                     |
|                                 | 37205-87-1  |                                     |
|                                 | 68412-54-4  |                                     |
|                                 | 9016-45-9   |                                     |
| Octylphenol (OP), mixed isomers | Several     | 5                                   |
|                                 | 140-66-9    |                                     |
|                                 | 1806-26-4   |                                     |
|                                 | 27193-28-8  |                                     |
| Octylphenol ethoxylates (OPEO)  | Several     | 5                                   |
|                                 | 68987-90-6  |                                     |
|                                 | 9002-93-1   |                                     |
|                                 | 9036-19-5   |                                     |
|                                 | Several     |                                     |

**Table 10. Substance limit values for untreated wastewater - Biocides**

| Substance / Parameter        | CAS No.    | Requirement - Limit value (µg/L) |
|------------------------------|------------|----------------------------------|
| Dimethylfumarate             | 624-49-7   | 50                               |
| o-Phenylphenol and its salts | 90-43-7    | 100                              |
| Permethrin                   | 52645-53-1 | 500                              |
|                              | Several    |                                  |
| Triclosan                    | 3380-34-5  | 100                              |

**Table 11. Substance limit values for untreated wastewater - Chlorinated paraffins, all chain lengths**

| Substance / Parameter                 | CAS No.    | Requirement - Limit value (µg/L) |
|---------------------------------------|------------|----------------------------------|
| Paraffin, C14-C17, chlorinated (MCCP) | 85535-85-9 | 500                              |
| Paraffin, C10-C13, chlorinated (SCCP) | 85535-84-8 | 25                               |

**Table 12. Substance limit values for untreated wastewater - Chlorinated Benzenes and Toluenes**

| Substance / Parameter                                       | CAS No.    | Requirement - Limit value (µg/L) |
|-------------------------------------------------------------|------------|----------------------------------|
| Chlorinated Toluenes / Monochlorotoluenes, Dichlorotoluenes | 1006-31-1  | 0.2                              |
|                                                             | 1006-32-2  |                                  |
|                                                             | 106-43-4   |                                  |
|                                                             | 108-41-8   |                                  |
|                                                             | 118-69-4   |                                  |
|                                                             | 19398-61-9 |                                  |
|                                                             | 2077-46-5  |                                  |
|                                                             | 21472-86-6 |                                  |
|                                                             | 25186-47-4 |                                  |
|                                                             | 32768-54-0 |                                  |
|                                                             | 6639-30-1  |                                  |
|                                                             | 875-40-1   |                                  |
|                                                             | 877-11-2   |                                  |
|                                                             | 95-49-8    |                                  |
|                                                             | 95-73-8    |                                  |
|                                                             | 95-75-0    |                                  |
|                                                             | Several    |                                  |

| Substance / Parameter                                                                                       | CAS No.    | Requirement - Limit value (µg/L) |
|-------------------------------------------------------------------------------------------------------------|------------|----------------------------------|
| Chlorinated Benzenes / Monochlorobenzene, Pentachlorobenzene, Hexachlorobenzene, Di/Tri/Tetrachlorobenzenes | 106-46-7   | 0.2                              |
|                                                                                                             | 108-70-3   |                                  |
|                                                                                                             | 108-90-7   |                                  |
|                                                                                                             | 118-74-1   |                                  |
|                                                                                                             | 120-82-1   |                                  |
|                                                                                                             | 23749-65-7 |                                  |
|                                                                                                             | 541-73-1   |                                  |
|                                                                                                             | 608-93-5   |                                  |
|                                                                                                             | 634-66-2   |                                  |
|                                                                                                             | 634-90-2   |                                  |
|                                                                                                             | 7359-72-0  |                                  |
|                                                                                                             | 87-61-6    |                                  |
|                                                                                                             | 95-94-3    |                                  |
|                                                                                                             | Several    |                                  |

**Table 13. Substance limit values for untreated wastewater - Chlorinated Phenols**

| Substance / Parameter     | CAS No.    | Requirement - Limit value (µg/L) |
|---------------------------|------------|----------------------------------|
| 2,3,4,5-Tetrachlorophenol | 4901-51-3  | 0.5                              |
| 2,3,4,6-Tetrachlorophenol | 58-90-2    | 0.5                              |
| 2,3,4-Trichlorophenol     | 15950-66-0 | 0.5                              |
| 2,3,5,6-Tetrachlorophenol | 935-95-5   | 0.5                              |
| 2,3,5-Trichlorophenol     | 933-78-8   | 0.5                              |
| 2,3,6-Trichlorophenol     | 933-75-5   | 0.5                              |
| 2,3-Dichlorophenol        | 576-24-9   | 0.5                              |
| 2,4,5-Trichlorophenol     | 95-95-4    | 0.5                              |
| 2,4,6-Trichlorophenol     | 88-06-2    | 0.5                              |
| 2,4-Dichlorophenol        | 120-83-2   | 0.5                              |
| 2,5-Dichlorophenol        | 583-78-8   | 0.5                              |
| 2,6-Dichlorophenol        | 87-65-0    | 0.5                              |
| 2-Chlorophenol            | 95-57-8    | 0.5                              |
| 3,4,5-Trichlorophenol     | 609-19-8   | 0.5                              |
| 3,4-Dichlorophenol        | 95-77-2    | 0.5                              |
| 3,5-Dichlorophenol        | 591-35-5   | 0.5                              |
| 3-Chlorophenol            | 108-43-0   | 0.5                              |
| 4-Chlorophenol            | 106-48-9   | 0.5                              |
| Pentachlorophenol         | 87-86-5    | 0.5                              |

**Table 14. Substance limit values for untreated wastewater - Colorants with carcinogenic potential**

| Substance / Parameter                          | CAS No.    | Requirement - Limit value (µg/L) |
|------------------------------------------------|------------|----------------------------------|
| Basic Violet 3 with > 0.1% of Michler's Ketone | 548-62-9   | 500                              |
| Acid Red 26                                    | 3761-53-3  | 500                              |
| Acid Violet 49                                 | 1694-09-03 | 500                              |

| Substance / Parameter                        | CAS No.    | Requirement - Limit value (µg/L) |
|----------------------------------------------|------------|----------------------------------|
| Basic Blue 26 (with Michler's Ketone > 0.1%) | 2580-56-5  | 500                              |
| Basic Green 4 (Malachite Green Chloride)     | 569-64-2   | 500                              |
| Basic Green 4 (Malachite Green Oxalate)      | 2437-29-8  | 500                              |
| Basic Green 4 (Malachite Green)              | 10309-95-2 | 500                              |
| Leucomalachite green                         | 129-73-7   | 500                              |
| Basic Red 9                                  | 569-61-9   | 500                              |
| Basic Violet 14                              | 632-99-5   | 500                              |
| Direct Black 38                              | 1937-37-7  | 500                              |
| Direct Blue 6                                | 2602-46-2  | 500                              |
| Direct Red 28                                | 573-58-0   | 500                              |
| Disperse Blue 1                              | 2475-45-8  | 500                              |
| Disperse Blue 3                              | 2475-46-9  | 500                              |
| Disperse Orange 11                           | 82-28-0    | 500                              |

**Table 15. Substance limit values for untreated wastewater - Colorants - Disperse (Allergenic)**

| Substance / Parameter    | CAS No.    | Requirement - Limit value (µg/L) |
|--------------------------|------------|----------------------------------|
| Disperse Blue 102        | 12222-97-8 | 50                               |
| Disperse Blue 106        | 12223-01-7 | 50                               |
| Disperse Blue 124        | 61951-51-7 | 50                               |
| Disperse Blue 26         | 3860-63-7  | 50                               |
| Disperse Blue 35         | 12222-75-2 | 50                               |
|                          | 56524-77-7 |                                  |
| Disperse Blue 7          | 3179-90-6  | 50                               |
| Disperse Brown 1         | 23355-64-8 | 50                               |
| Disperse Orange 1        | 2581-69-3  | 50                               |
| Disperse Orange 3        | 730-40-5   | 50                               |
| Disperse Orange 37/59/76 | 13301-61-6 | 50                               |
| Disperse Red 1           | 2872-52-8  | 50                               |
| Disperse Red 11          | 2872-48-2  | 50                               |
| Disperse Red 17          | 3179-89-3  | 50                               |
| Disperse Yellow 1        | 119-15-3   | 50                               |
| Disperse Yellow 3        | 2832-40-8  | 50                               |
| Disperse Yellow 39       | 12236-29-2 | 50                               |
| Disperse Yellow 49       | 54824-37-2 | 50                               |
| Disperse Yellow 9        | 6373-73-5  | 50                               |

**Table 16. Substance limit values for untreated wastewater - Flame Retardants**

| Substance / Parameter                       | CAS No.    | Requirement - Limit value (µg/L) |
|---------------------------------------------|------------|----------------------------------|
| 2,2-Bis(bromomethyl)-1,3-propanediol (BBMP) | 3296-90-0  | 25                               |
| Bis(2,3-dibromopropyl) phosphate (BDBPP)    | 5412-25-9  | 25                               |
| Boric acid                                  | 10043-35-3 | 500                              |
|                                             | 11113-50-1 |                                  |
| Decabromo-1,1'-biphenyl                     | 13654-09-6 | 25                               |
| Decabromodiphenyl ether (DecaBDE)           | 1163-19-5  | 25                               |

| Substance / Parameter                                           | CAS No.    | Requirement - Limit value (µg/L) |
|-----------------------------------------------------------------|------------|----------------------------------|
| Diboron trioxide                                                | 1303-86-2  | 500                              |
| Dibromobiphenyls (DiBB)                                         | Several    | 25                               |
| Tetrabromobisphenol A bis(2,3-dibromopropylether)               | 21850-44-2 | 25                               |
| Disodium octaborate, anhydrous                                  | 12008-41-2 | 500                              |
| Disodium tetraborate, decahydrate/anhydrous                     | 1303-96-4  | 500                              |
|                                                                 | 1330-43-4  |                                  |
| Heptabromodiphenyl ether (HeptaBDE)                             | 68928-80-3 | 25                               |
| Hexabromocyclodecane (HBCDD)                                    | 3194-55-6  | 25                               |
| Hexabromodiphenyl ether (HexaBDE)                               | 36483-60-0 | 25                               |
| Monobromobiphenyls                                              | Several    | 25                               |
| Monobromodiphenylethers (MonoBDEs)                              | Several    | 25                               |
| Nonabromobiphenyls (NonaBB)                                     | Several    | 25                               |
| Nonabromodiphenyl ether (NonaBDE)                               | 63936-56-1 | 25                               |
| Octabromobiphenyls (OctaBB)                                     | Several    | 25                               |
| Octabromodiphenyl ether (OctaBDE)                               | 32536-52-0 | 25                               |
| Pentabromodiphenyl ether (PentaBDE)                             | 32534-81-9 | 25                               |
| Polybromobiphenyls (PBB)                                        | 59536-65-1 | 25                               |
| Tetraboron disodium heptaoxide, hydrate                         | 12267-73-1 | 500                              |
| Tetrabromobisphenol A (TBBPA)                                   | 79-94-7    | 25                               |
| Tetrabromodiphenyl ether (TetraBDE)                             | 40088-47-9 | 25                               |
| Tri-o-cresyl phosphate                                          | 78-30-8    | 25                               |
| Tribromodiphenylethers (TriBDEs)                                | Several    | 25                               |
| Trimethyl phosphate                                             | 512-56-1   | 25                               |
| Tris-[2-chloro-1-(chloromethyl)ethyl] phosphate (TDCP or TDCPP) | 13674-87-8 | 25                               |
| Tri(aziridin-1-yl) phosphine oxide (TEPA)                       | 545-55-1   | 25                               |
| Tris(2,3,-dibromopropyl) phosphate (TRIS)                       | 126-72-7   | 25                               |
| Tris(2-chloro-1-methylethyl) phosphate (TCPP)                   | 13674-84-5 | 25                               |
| Tris(2-chloroethyl) phosphate (TCEP)                            | 115-96-8   | 25                               |
| Trixylyl phosphate (TXP)                                        | 25155-23-1 | 25                               |

**Table 17. Substance limit values for untreated wastewater - Glycols**

| Substance / Parameter             | CAS No.    | Requirement - Limit value (µg/L) |
|-----------------------------------|------------|----------------------------------|
| 2-Methoxy-1-propanol              | 1589-47-5  | 50                               |
| 2-Methoxyethyl acetate            | 110-49-6   | 50                               |
| 2-Methoxypropyl acetate           | 70657-70-4 | 50                               |
| 2-ethoxyethanol                   | 110-80-5   | 50                               |
| 2-ethoxyethyl acetate             | 111-15-9   | 50                               |
| 2-methoxyethanol                  | 109-86-4   | 50                               |
| Bis(2-methoxyethyl) ether         | 111-96-6   | 50                               |
| Ethylene glycol dimethyl ether    | 110-71-4   | 50                               |
| Triethylene glycol dimethyl ether | 112-49-2   | 50                               |

**Table 18. Substance limit values for untreated wastewater - Halogenated Solvents**

| Substance / Parameter | CAS No.  | Requirement - Limit value (µg/L) |
|-----------------------|----------|----------------------------------|
| 1,2-Dichloroethane    | 107-06-2 | 1                                |
| Dichloromethane       | 75-09-2  | 1                                |

| Substance / Parameter | CAS No.  | Requirement - Limit value (µg/L) |
|-----------------------|----------|----------------------------------|
| Tetrachloroethylene   | 127-18-4 | 1                                |
| Trichloroethylene     | 79-01-6  | 1                                |

**Table 19. Substance limit values for untreated wastewater - Organic Solvents**

| Substance / Parameter | CAS No.                     | Requirement - Limit value (µg/L) |
|-----------------------|-----------------------------|----------------------------------|
| Benzene               | 71-43-2                     | 1                                |
| Sum of o,m,p-cresol   | 108-39-4, 95-48-7, 106-44-5 | 1                                |
| Sum of o,m,p-xylene   | 106-42-3, 95-47-6, 108-38-3 | 1                                |
| Toluene               | 108-88-3                    | 1                                |

**Table 20. Substance limit values for untreated wastewater - Tin-organic Compounds**

| Substance / Parameter                                                  | CAS No.   | Requirement - Limit value (µg/L) |
|------------------------------------------------------------------------|-----------|----------------------------------|
| Dibutyltin (DBT)                                                       | 683-18-1  | 0.01                             |
| Dipropyltin compounds (DPT)                                            | 867-36-7  | 0.01                             |
|                                                                        | Several   |                                  |
|                                                                        | 1118-46-3 |                                  |
| Monobutyltin (MBT) / Dibutyltin (DBT) / Tributyltin (TBT) compounds    | 1461-22-9 | 0.01                             |
|                                                                        | Several   |                                  |
|                                                                        | 1066-45-1 |                                  |
| Monomethyltin (MMT) / Dimethyltin (DMT) / Trimethyltin (TMT) compounds | 753-73-1  | 0.01                             |
|                                                                        | 993-16-8  |                                  |
|                                                                        | Several   |                                  |
|                                                                        | 2587-76-0 |                                  |
| Monooctyltin (MOT) / Dioctyltin (DOT) / Trioctyltin (TOT) compounds    | 3091-25-6 | 0.01                             |
|                                                                        | 3542-36-7 |                                  |
|                                                                        | Several   |                                  |
|                                                                        | 1124-19-2 |                                  |
| Mono-, di- and tri-phenyltin derivatives                               | 1135-99-5 | 0.01                             |
|                                                                        | 639-58-7  |                                  |
|                                                                        | Several   |                                  |
| Tetrabutyltin Compounds (TeBT)                                         | 1461-25-2 | 0.01                             |
|                                                                        | Several   |                                  |
| Tetraethyltin Compounds (TeET)                                         | 597-64-8  | 0.01                             |
|                                                                        | Several   |                                  |
| Tetraoctyltin Compounds (TeOT)                                         | 3590-84-9 | 0.01                             |
|                                                                        | Several   |                                  |
| Tricyclohexyltin (TCyHT)                                               | 3091-32-5 | 0.01                             |
|                                                                        | Several   |                                  |
| Tripropyltin Compounds (TPT)                                           | 2279-76-7 | 0.01                             |
|                                                                        | Several   |                                  |

**Table 21. Substance limit values for untreated wastewater - Other Chemical Substances**

| Substance / Parameter         | CAS No.     | Requirement - Limit value (µg/L) |
|-------------------------------|-------------|----------------------------------|
| Aminoethylethanolamine (AEEA) | 111-41-1    | 500                              |
| Bisphenol A (BPA)             | 80-05-7     | 10                               |
| Boron zinc oxide              | 12767-90-7  | 500                              |
| Perboric acid, sodium salt    | 11138-47-9  | 500                              |
|                               | 125022-34-6 |                                  |
|                               | 13517-20-9  |                                  |
|                               | 15120-21-5  |                                  |
|                               | 16940-66-2  |                                  |
|                               | 7632-04-04  |                                  |
|                               | 90568-23-3  |                                  |
| Quinoline                     | 91-22-5     | 50                               |
| Thiourea                      | 62-56-6     | 50                               |

**Table 22. Substance limit values for untreated wastewater - PFAS (Poly- and perfluoroalkyl substances)**

| Substance / Parameter                                       | CAS No.   | Requirement - Limit value (µg/L) |
|-------------------------------------------------------------|-----------|----------------------------------|
| 10:2 Fluorotelomer alcohols (10:2 FTOH)                     | 865-86-1  | 1                                |
| 4:2 Fluorotelomer alcohols (4:2 FTOH)                       | 2043-47-2 | 1                                |
| 6:2 Fluorotelomer alcohols (6:2 FTOH)                       | 647-42-7  | 1                                |
| 8:2 Fluorotelomer alcohols (8:2 FTOH)                       | 678-39-7  | 1                                |
| Perfluorobutane sulfonic acid (PFBS)                        | 375-73-5  | 1                                |
| Perfluorobutanoic acid (PFBA)                               | 375-22-4  | 1                                |
| Perfluorodecane sulfonic acid (PFDS)                        | 335-77-3  | 1                                |
| Perfluorodecanoic acid (PFDA)                               | 335-76-2  | 1                                |
| Perfluorohexane sulfonic acid (PFHxS)                       | 355-46-4  | 1                                |
| Perfluorohexanoic acid (PFHxA) and related substances       | 307-24-4  | 1                                |
| Perfluorooctane sulfonic acid (PFOS) and related substances | 1763-23-1 | 1                                |
|                                                             | Several   |                                  |
| Perfluorooctanoic acid (PFOA) and related substances        | 335-67-1  | 1                                |
|                                                             | Several   |                                  |

**Table 23. Substance limit values for untreated wastewater - Plasticizers**

| Substance / Parameter                                                                  | CAS No.    | Requirement - Limit value (µg/L) |
|----------------------------------------------------------------------------------------|------------|----------------------------------|
| 1,2-Benzenedicarboxylic acid, di-C6-8-branched and linear alkyl esters, C7-rich (DIHP) | 71888-89-6 | 10                               |
| 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)        | 68515-42-4 | 10                               |
|                                                                                        | 68515-50-4 |                                  |
| 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear                       | 68515-50-4 | 10                               |
| 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear                       | 84777-06-0 | 10                               |
| Bis(2-methoxyethyl) phthalate (DMEP)                                                   | 117-82-8   | 10                               |
| Butyl benzyl phthalate (BBP)                                                           | 85-68-7    | 10                               |
| Di(ethylhexyl) phthalate (DEHP)                                                        | 117-81-7   | 10                               |

| Substance / Parameter          | CAS No.     | Requirement - Limit value (µg/L) |
|--------------------------------|-------------|----------------------------------|
| Di-cyclohexyl phthalate (DCHP) | 84-61-7     | 10                               |
| Di-iso-butyl phthalate (DIBP)  | 84-69-5     | 10                               |
| Di-iso-decyl phthalate (DIDP)  | 26761-40-0  | 10                               |
| Di-iso-octyl phthalate (DIOP)  | 27554-26-3  | 10                               |
| Di-isononyl phthalate (DINP)   | 28553-12-0  | 10                               |
| Di-n-hexyl phthalate (DnHP)    | 84-75-3     | 10                               |
| Di-n-octyl phthalate (DNOP)    | 117-84-0    | 10                               |
| Di-n-pentylphthalates (DnPP)   | 131-18-0    | 10                               |
| Di-n-propyl phthalate (DPRP)   | 131-16-8    | 10                               |
| Dibutyl phthalate (DBP)        | 84-74-2     | 10                               |
| Diethyl phthalate (DEP)        | 84-66-2     | 10                               |
| Diisohexyl phthalate           | 71850-09-4  | 10                               |
| Diisopentyl phthalates (DIPP)  | 605-50-5    | 10                               |
| Dinonyl phthalate (DNP)        | 84-76-4     | 10                               |
| n-Pentyl-isopentyl phthalate   | 776297-69-9 | 10                               |

**Table 24. Substance limit values for untreated wastewater - Polyaromatic hydrocarbons (PAHs)**

| Substance / Parameter  | CAS No.  | Requirement - Limit value (µg/L) |
|------------------------|----------|----------------------------------|
| Acenaphthene           | 83-32-9  | 1                                |
| Acenaphthylene         | 208-96-8 | 1                                |
| Anthracene             | 120-12-7 | 1                                |
| Benzo[a]anthracene     | 56-55-3  | 1                                |
| Benzo[a]pyrene (BaP)   | 50-32-8  | 1                                |
| Benzo[b]fluoranthene   | 205-99-2 | 1                                |
| Benzo[e]pyrene         | 192-97-2 | 1                                |
| Benzo[ghi]perylene     | 191-24-2 | 1                                |
| Benzo[j]fluoranthene   | 205-82-3 | 1                                |
| Benzo[k]fluoranthene   | 207-08-9 | 1                                |
| Chrysene               | 218-01-9 | 1                                |
| Dibenz[a,h]anthracene  | 53-70-3  | 1                                |
| Fluoranthene           | 206-44-0 | 1                                |
| Fluorene               | 86-73-7  | 1                                |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 1                                |
| Naphthalene            | 91-20-3  | 1                                |
| Phenanthrene           | 85-01-8  | 1                                |
| Pyrene                 | 129-00-0 | 1                                |

**Table 25. Substance limit values for untreated wastewater - Arylamines**

| Substance / Parameter                | CAS No.    | Requirement - Limit value (µg/L) |
|--------------------------------------|------------|----------------------------------|
| 2,4,5-Trimethylaniline               | 137-17-7   | 0.1                              |
| 2,4,5-trimethylaniline hydrochloride | 21436-97-5 | 0.1                              |
| 2,4-Diaminoanisol                    | 615-05-4   | 0.1                              |
| 2,4-Toluenediamine                   | 95-80-7    | 0.1                              |
| 2,4-Xylidine                         | 95-68-1    | 0.1                              |
| 2,6-Xylidine                         | 87-62-7    | 0.1                              |
| 2-Naphthylamine                      | 91-59-8    | 0.1                              |

| Substance / Parameter                                      | CAS No.    | Requirement - Limit value (µg/L) |
|------------------------------------------------------------|------------|----------------------------------|
| 2-Naphthylammoniumacetate                                  | 553-00-4   | 0.1                              |
| 3,3'-Dichlorobenzidine                                     | 91-94-1    | 0.1                              |
| 3,3-Dimethoxybenzidine                                     | 119-90-4   | 0.1                              |
| 3,3-Dimethylbenzidine                                      | 119-93-7   | 0.1                              |
| 4,4'-Methylene-bis-(2-chloroaniline)                       | 101-14-4   | 0.1                              |
| 4,4'-Methylenedi-o-toluidine                               | 838-88-0   | 0.1                              |
| 4,4'-Oxydianiline                                          | 101-80-4   | 0.1                              |
| 4,4'-Thiodianiline                                         | 139-65-1   | 0.1                              |
| 4,4-Methylenedianiline                                     | 101-77-9   | 0.1                              |
| 4-Aminoazobenzene                                          | 60-09-3    | 0.1                              |
| 4-Aminodiphenyl                                            | 92-67-1    | 0.1                              |
| 4-Chloro-o-toluidine                                       | 95-69-2    | 0.1                              |
| 4-Chloroaniline                                            | 106-47-8   | 0.1                              |
| 4-chloro-o-toluidinium chloride                            | 3165-93-3  | 0.1                              |
| 4-methoxy-m-phenylene diammonium sulphate;2,4-diaminoaniso | 39156-41-7 | 0.1                              |
| 4-methoxy-m-phenylenediamine                               | 615-05-04  | 0.1                              |
| 4-methyl-m-phenylenediamine                                | 95-80-7    | 0.1                              |
| 5-nitro-o-toluidine                                        | 99-55-8    | 0.1                              |
| 6-methoxy-m-toluidine                                      | 120-71-8   | 0.1                              |
| Benzidine                                                  | 92-87-5    | 0.1                              |
| o-Aminoazotoluene                                          | 97-56-3    | 0.1                              |
| o-Anisidine                                                | 90-04-0    | 0.1                              |
| o-Toluidine                                                | 95-53-4    | 0.1                              |

**Table 26. Substance limit values for untreated wastewater - UV Stabilizers**

| Substance / Parameter | CAS No.    | Requirement - Limit value (µg/L) |
|-----------------------|------------|----------------------------------|
| UV-327                | 3864-99-1  | 100                              |
| UV-328                | 25973-55-1 | 100                              |
| UV-350                | 36437-37-3 | 100                              |
| UV-320                | 3846-71-7  | 100                              |

### 3.9.1.2.1.6 For the process: Fiber manufacturing

#### 3.9.1.2.1.6.1 Emission to water limit values for viscose staple fiber manufacturing

**Table 27. Emission to water limit values for viscose staple fiber manufacturing<sup>a</sup>.**

| Parameter       | Unit | Requirement - Specific emission/Concentration |
|-----------------|------|-----------------------------------------------|
| COD             | kg/t | 5                                             |
| Zinc (Zn)       | kg/t | 0.05                                          |
| CS <sub>2</sub> | mg/L | 0.2                                           |
| Sulfate         | kg/t | 300                                           |

<sup>a</sup>Measuring point for wastewater: before discharge to receiving water body

Specific emission shall be determined by a reliable mass balance on a yearly basis. The average of at least four wastewater tests and the average of the continuous wastewater volume measurements shall be used for calculation.

### 3.9.1.2.1.7 For the process: Fabricated metal part manufacturing

#### 3.9.1.2.1.7.1 (Electro-)chemical wet processes

**Table 28. Wastewater limit values for (electro-)chemical wet processes**

| Parameter                              | Unit | Direct discharge | Indirect discharge | Electroplating       | Pickling | Anodizing | Black oxide finishing |
|----------------------------------------|------|------------------|--------------------|----------------------|----------|-----------|-----------------------|
| Aluminum                               | mg/L | x                | -                  | 3                    | 3        | 3         | 3                     |
| COD                                    | mg/L | x                | -                  | 400                  | 100      | 100       | 200                   |
| Fish egg toxicity                      | LID  | x                | -                  | 6                    | 4        | 2         | 6                     |
| Fluoride                               | mg/L | x                | -                  | 50                   | 20       | 50        | -                     |
| Hydrocarbons                           | mg/L | x                | -                  | 10                   | 10       | 10        | 10                    |
| Iron                                   | mg/L | x                | -                  | 3                    | 3        | -         | 3                     |
| Ammonium nitrogen (NH <sub>4</sub> -N) | mg/L | x                | -                  | 100                  | 30       | -         | 30                    |
| NO <sub>3</sub> -N                     | mg/L | x                | -                  | -                    | 5        | 5         | 5                     |
| Phosphorous (total)                    | mg/L | x                | -                  | 2                    | 2        | 2         | 2                     |
| AOX                                    | mg/L | x                | x                  | 1                    | 1        | 1         | 1                     |
| Arsenic                                | mg/L | x                | x                  | 0.1                  | -        | -         | -                     |
| Cadmium                                | mg/L | x                | x                  | 0.2                  | -        | -         | -                     |
| Chromium (total)                       | mg/L | x                | x                  | 0.5                  | 0.5      | 0.5       | 0.5                   |
| Chromium (VI)                          | mg/L | x                | x                  | 0.1                  | 0.1      | 0.1       | 0.1                   |
| Cobalt                                 | mg/L | x                | x                  | -                    | -        | 1         | -                     |
| Copper                                 | mg/L | x                | x                  | 0.5                  | 0.5      | -         | -                     |
| Cyanide                                | mg/L | x                | x                  | 0.2                  | -        | -         | -                     |
| Free chlorine                          | mg/L | x                | x                  | 0.5                  | 0.5      | -         | 0.5                   |
| Lead                                   | mg/L | x                | x                  | 0.5                  | -        | -         | -                     |
| Mercury                                | mg/L | x                | x                  | 0.05                 | 0.05     | 0.05      | 0.05                  |
| Nickel                                 | mg/L | x                | x                  | 0.5                  | 0.5      | -         | 0.5                   |
| Selenium                               | mg/L | x                | x                  | -                    | -        | -         | -                     |
| Silver                                 | mg/L | x                | x                  | 0.1                  | -        | -         | -                     |
| Sulfide                                | mg/L | x                | x                  | 1                    | 1        | -         | 1                     |
| Tin                                    | mg/L | x                | x                  | 2                    |          | 2         | -                     |
| Zinc                                   | mg/L | x                | x                  | 2                    | 2        | 2         | -                     |
| EDTA                                   | mg/L | x                | x                  | shall not be present |          |           |                       |

Possibilities to destroy cyanides without the application of hypochlorite shall be evaluated (e.g. by applying UV/H<sub>2</sub>O<sub>2</sub> process or potassium peroxymonosulfate).

#### 3.9.1.2.1.7.2 Other surface treatment processes

**Table 29. Wastewater limit values for other surface treatment processes**

| Parameter | Unit | Direct discharge | Indirect discharge | Hot-dip galvanizing | Enameling | Solvent free varnishing | Mechanical surface treatment |
|-----------|------|------------------|--------------------|---------------------|-----------|-------------------------|------------------------------|
| Aluminum  | mg/L | x                | -                  | -                   | 2         | -                       | 3                            |

| Parameter                              | Unit | Direct discharge | Indirect discharge | Hot-dip galvanizing | Enameling | Solvent free varnishing | Mechanical surface treatment |
|----------------------------------------|------|------------------|--------------------|---------------------|-----------|-------------------------|------------------------------|
| COD                                    | mg/L | x                | -                  | 200                 | 100       | 300                     | 400                          |
| Fish egg toxicity                      |      | x                | -                  | 6                   | 4         | 6                       | 6                            |
| Fluoride                               | mg/L | x                | -                  | 50                  | 50        | -                       | 30                           |
| Hydrocarbons                           | mg/L | x                | -                  | 10                  | 10        | 10                      | 10                           |
| Iron                                   | mg/L | x                | -                  | 3                   | 3         | 3                       | 3                            |
| Ammonium nitrogen (NH <sub>4</sub> -N) | mg/L | x                | -                  | 30                  | 20        | -                       | 30                           |
| NO <sub>3</sub> -N                     | mg/L | x                | -                  | -                   | 5         | -                       | 5                            |
| Phosphorous (total)                    | mg/L | x                | -                  | 2                   | 2         | 2                       | 2                            |
| AOX                                    | mg/L | x                | x                  | 1                   | 1         | 1                       | 1                            |
| Arsenic                                | mg/L | x                | x                  | -                   | -         | 3                       | -                            |
| Cadmium                                | mg/L | x                | x                  | 0.1                 | 0.2       | 0.2                     | 0.1                          |
| Chromium (total)                       | mg/L | x                | x                  | -                   | 0.5       | 0.5                     | 0.5                          |
| Chromium (VI)                          | mg/L | x                | x                  | -                   | 0.1       | 0.1                     | 0.1                          |
| Cobalt                                 | mg/L | x                | x                  | -                   | 1         | -                       | -                            |
| Copper                                 | mg/L | x                | x                  | -                   | 0.5       | 0.5                     | 0.5                          |
| Cyanide                                | mg/L | x                | x                  | -                   | -         | -                       | 0.2                          |
| Free chlorine                          | mg/L | x                | x                  | -                   | -         | -                       | 0.5                          |
| Lead                                   | mg/L | x                | x                  | 0.5                 | 0.5       | 0.5                     | 0.5                          |
| Mercury                                | mg/L | x                | x                  | 0.05                | 0.05      | 0.05                    | -                            |
| Nickel                                 | mg/L | x                | x                  | -                   | 0.5       | 0.5                     | 0.5                          |

| Parameter | Unit | Direct discharge | Indirect discharge | Hot-dip galvanizing  | Enameling | Solvent free varnishing | Mechanical surface treatment |
|-----------|------|------------------|--------------------|----------------------|-----------|-------------------------|------------------------------|
| Selenium  | mg/L | x                | x                  | -                    | 1         | -                       | -                            |
| Sulfide   | mg/L | x                | x                  | -                    | 1         | -                       | -                            |
| Tin       | mg/L | x                | x                  | 2                    | -         | -                       | -                            |
| Zinc      | mg/L | x                | x                  | 2                    | 2         | 2                       | 2                            |
| EDTA      | mg/L | x                | x                  | Shall not be present |           |                         |                              |

### 3.9.1.2.2 Air emissions

#### 3.9.1.2.2.1 Emission requirements for VOC-relevant production sites

**Table 30. Emission requirements for VOC-relevant production sites**

| Parameter                                           | Standard method                            | Requirement - Limit value |
|-----------------------------------------------------|--------------------------------------------|---------------------------|
| TOC concentration (at each VOC-relevant stack)      | EN 12619                                   | 50 mg/m <sup>3</sup>      |
| TOC mass flow rate (whole facility)                 |                                            | 0.50 kg/h                 |
| TOC removal efficiency (at each VOC-relevant stack) | Calculation based on EN 12619 measurements | ≥ 80 %                    |

The calculation of the total annual TOC or VOC stack emission is to be done as part of the solvent mass balance.

#### 3.9.1.2.2.2 Emission requirements for textile finishing and heat-setting processes

**Table 31. Emission requirements for textile finishing and heat-setting processes**

| Parameter                                           | Standard method | Requirement - Limit value     |
|-----------------------------------------------------|-----------------|-------------------------------|
| TOC Concentration (at each textile finishing stack) |                 | 40 mg/m <sup>3</sup>          |
| <b>and</b>                                          | EN 12619        |                               |
| Specific TOC emission per kg textile                |                 | 0.8 g/kg textile <sup>a</sup> |
| TOC mass flow rate (whole facility)                 |                 | 0.80 kg/h                     |
| <b>and</b>                                          |                 |                               |
| Specific TOC emission per kg textile                |                 | 0.8 g/kg textile <sup>a</sup> |

<sup>a</sup>Calculation reference: TOC concentration limit of 40 mg/m<sup>3</sup> and an air/textile ratio of 20 Nm<sup>3</sup>/kg textile

The specific actual TOC emission per kg textile ( $SE_{TOC}$ ) shall be calculated by the textile manufacturer based on the available stenter air flow rate in ( $V_{air}$  in Nm<sup>3</sup>/h), the production rate in ( $m_{textile}$  in kg/h) and the TOC concentration in the off-gas ( $C_{TOC}$  in mg/m<sup>3</sup>) according to the following equation:

$$SE_{TOC} = \frac{V_{air}}{m_{textile}} \cdot C_{TOC} \quad (2)$$

### 3.9.1.2.2.3 Performance requirements for off-gas abatement systems at CMR-solvent-relevant material suppliers

**Table 32. Performance requirements for off-gas abatement systems at CMR-solvent-relevant material suppliers**

| Parameter                                           | Standard method                            | Requirement - Limit value |
|-----------------------------------------------------|--------------------------------------------|---------------------------|
| TOC removal efficiency (at each CMR-relevant stack) | Calculation based on EN 12619 measurements | ≥ 95 %                    |
| Efficiency of solvent recycling system              |                                            | ≥ 95 %                    |
| TOC concentration (all relevant emission points)    |                                            | 10 mg/m <sup>3</sup>      |

### 3.9.1.2.2.4 Emissions from power generation and boiler house (supply units)

**Table 33. Emission limits for generation of thermal energy<sup>a</sup>.**

| Fuel type    | Capacity   | Dust [mg/Nm <sup>3</sup> ] | NO <sub>x</sub> [mg/Nm <sup>3</sup> ] | SO <sub>2</sub> [mg/Nm <sup>3</sup> ] | CO [mg/Nm <sup>3</sup> ]       |
|--------------|------------|----------------------------|---------------------------------------|---------------------------------------|--------------------------------|
| Solid fuel   | 1 - 5 MW   | 50                         | 650                                   | 1100<br>(200 for solid biomass)       | 160<br>(220 for solid biomass) |
|              | >5 - 50 MW | 30                         | 650                                   | 400                                   | 160                            |
|              |            | (50 if ≤20 MW)             |                                       | (200 for solid biomass)               | (220 for solid biomass)        |
|              | >50 MW     | 30                         | 300                                   | 400<br>(200 for solid biomass)        | 150<br>(250 for solid biomass) |
| Liquid fuel  | 1 - 5 MW   | 50                         | 650                                   | 350                                   | 80                             |
|              | >5 - 50 MW | 30                         | 650                                   | 350                                   | 80                             |
|              | >50 MW     | 30                         | 450                                   | 350                                   | 80                             |
| Gaseous fuel | 1 - 5 MW   | 10                         | 250                                   | 200                                   | 80                             |
|              | >5 - 50 MW | 10                         | 200                                   | 35<br>(170 for biogas)                | 80                             |
|              |            |                            |                                       | 35                                    | 100                            |

<sup>a</sup>Installations <1 MW shall follow national/local law.

The emission limits are based on EU Directive 2015/2193 for existing plants, the EU Industrial Emissions Directive (IED) for installations according to Article 30(2) (50–100 MW), and the requirements of the German 44. BImSchV and 13. BImSchV.

All emission limit values are under standard reference conditions of temperature 273.15 K (0 °C), pressure 101.3 kPa, dry flue gas, after correction for water vapor.

Oxygen (O<sub>2</sub>) reference values differ by fuel type and equipment and are not directly comparable across categories without normalization:

- Solid fuel boilers: 6% O<sub>2</sub> (coal/coke 7%, biomass/peat 11% where applicable)
- Liquid and gaseous fuel boilers: 3% O<sub>2</sub>

### 3.9.1.2.2.5 For the process: Fiber manufacturing

#### 3.9.1.2.2.5.1 Emission to air limit values for viscose staple fiber manufacturing

**Table 34. Emission to air limit values for viscose staple fiber manufacturing<sup>a</sup>.**

| Parameter        | Unit              | Requirement - Specific emission/Concentration |
|------------------|-------------------|-----------------------------------------------|
| Sulfur           | kg/t              | 20                                            |
| CS <sub>2</sub>  | mg/m <sup>3</sup> | 150                                           |
| H <sub>2</sub> S | mg/m <sup>3</sup> | 50                                            |

<sup>a</sup>Measuring point for air emissions: all captured emissions

Specific emission shall be determined by a reliable mass balance on a yearly basis.

### 3.9.1.2.3 Environmental noise

**Table 35. Limits for environmental noise<sup>a</sup>.**

| Area                  | LAeq <sup>b</sup> (dBA) |                    |
|-----------------------|-------------------------|--------------------|
|                       | day                     | night <sup>c</sup> |
| Mixed industrial area | 65                      | 55                 |
| Industrial area       | 70                      | 70                 |

<sup>a</sup>If no legal limits are available, bluesign limits are applicable.

<sup>b</sup>Level A-weighted equivalent

<sup>c</sup>10 pm to 6 am; measurement at the factory fence in all four directions

### 3.9.1.3 Occupational health and safety

#### 3.9.1.3.1 Occupational exposure limits (OELs)

The OELs for the most common chemical substances within the scope of the bluesign System are listed in the following table:

| Substance                                              | CAS No.                | Requirement - OELs |                        | Recommendation - Goal OELs         | Source of limit |
|--------------------------------------------------------|------------------------|--------------------|------------------------|------------------------------------|-----------------|
|                                                        |                        | [ppm] <sup>a</sup> | [mg/m <sup>3</sup> ]   |                                    |                 |
| Acetic acid                                            | 64-19-7                | 10                 | 25                     |                                    | 1 [68]          |
| Acetone                                                | 67-64-1                | 500                | 1200                   |                                    | 1 [68]          |
| Acrylamide <sup>b</sup>                                | 79-06-1                |                    | 0.15                   | 0.07 mg/m <sup>3</sup>             | 2 [68]          |
| Acrylonitrile <sup>b</sup>                             | 107-13-1               | 1.2                | 2.6                    | 0.12 ppm<br>0.26 mg/m <sup>3</sup> | 2 [68]          |
| Ammonia                                                | 7664-41-7              | 20                 | 14                     |                                    | 1 [68]          |
| Aniline <sup>c</sup>                                   | 62-53-3                | 2                  | 7.7                    |                                    | 1 [68]          |
| Antimony trioxide (as Sb)                              | 1309-64-4              |                    | 0.5                    |                                    | 3 [68]          |
| Benzene <sup>b</sup>                                   | 71-43-2                | 0.6                | 1.9                    | 0.06 ppm<br>0.2 mg/m <sup>3</sup>  | 2 [68]          |
| Benzyl alcohol <sup>b,c</sup>                          | 100-51-6               | 5                  | 22                     |                                    | 1 [68]          |
| 1,3-Butadiene                                          | 106-99-0               | 2                  | 5                      | 0.2 ppm<br>0.5 mg/m <sup>3</sup>   | 2 [68]          |
| 1-Butanol (Butyl alcohol)                              | 71-36-3                | 100                | 310                    |                                    | 1 [68]          |
| 2-Butoxyethanol <sup>b</sup>                           | 111-76-2               | 10                 | 49                     |                                    | 1 [68]          |
| n-Butyl acetate                                        | 123-86-4               | 62                 | 300                    |                                    | 1 [68]          |
| Carbon disulfide <sup>b</sup>                          | 75-15-0                | 10                 | 30                     |                                    | 1 [68]          |
| ε-Caprolactam <sup>b,c</sup>                           | 105-60-2               |                    | 5 (l) <sup>d</sup>     |                                    | 1 [68]          |
| Chlorine                                               | 7782-50-5              | 0.5                | 1.5                    |                                    | 1 [68]          |
| Chromium(VI) compounds (as Cr)                         | 1333-82-0 <sup>e</sup> |                    | 0.001 (l) <sup>d</sup> |                                    | 5 [68]          |
| Cyclohexane                                            | 110-82-7               | 200                | 700                    |                                    | 1 [68]          |
| Cyclohexanone <sup>b</sup>                             | 108-94-1               | 20                 | 80                     |                                    | 1 [68]          |
| 4,4'-Diaminodiphenylmethane <sup>b</sup>               | 101-77-9               |                    | 0.7                    | 0.07 mg/m <sup>3</sup>             | 2 [68]          |
| Dichloromethane <sup>b</sup>                           | 75-09-2                | 50                 | 180                    |                                    | 1 [68]          |
| Diethylenetriamine <sup>b</sup>                        | 111-40-0               | 1                  | 4                      |                                    | 4 [68]          |
| Diethylene glycol <sup>c</sup>                         | 111-46-6               | 10                 | 44                     |                                    | 1 [68]          |
| 3,3'-Dimethyl-4,4'-diaminodiphenylmethane <sup>b</sup> | 838-88-0               |                    | 0.05                   |                                    | 4 [68]          |
| N,N-Dimethylacetamide <sup>b</sup>                     | 127-19-5               | 5                  | 18                     |                                    | 1 [68]          |
| N,N-Dimethylformamide (DMF) <sup>b</sup>               | 68-12-2                | 5                  | 15                     |                                    | 1 [68]          |
| Dimethyl sulfate <sup>b</sup>                          | 77-78-1                | 1                  | 5                      |                                    | 3 [68]          |
| 1,4-Dioxane <sup>b</sup>                               | 123-91-1               | 20                 | 73                     |                                    | 1 [68]          |

| Substance                                             | CAS No.    | Requirement - OELs |                        | Recommendation - Goal OELs       | Source of limit |
|-------------------------------------------------------|------------|--------------------|------------------------|----------------------------------|-----------------|
| Diisocyanates (expressed as NCO)                      | e.         |                    | 0.010                  | 0.006 mg/m <sup>3</sup> by 2029  | 6 [68]          |
| Dust particles:                                       |            |                    |                        |                                  |                 |
| Inhalable fraction (I) <sup>d.</sup>                  | ---        | ---                | 10 (I)                 |                                  | 7 [68]          |
| Respirable fraction (R) <sup>f.</sup>                 | ---        | ---                | 1.25 (R)               |                                  |                 |
| Epichlorohydrin <sup>b.</sup>                         | 106-89-8   | 2                  | 8                      | 0.5 ppm<br>1.9 mg/m <sup>3</sup> | 2 [68]          |
| Ethyl acetate                                         | 141-78-6   | 200                | 730                    |                                  | 1 [68]          |
| Ethyl alcohol                                         | 64-17-5    | 200                | 380                    |                                  | 1 [68]          |
| Ethylbenzene <sup>b.</sup>                            | 100-41-4   | 20                 | 88                     |                                  | 1 [68]          |
| Ethylene oxide <sup>b.</sup>                          | 75-21-8    | 1                  | 2                      | 0.1 ppm<br>0.2 mg/m <sup>3</sup> | 2 [68]          |
| Formaldehyde                                          | 50-00-0    | 0.3                | 0.37                   |                                  | 1 [68]          |
| Formic acid                                           | 64-18-6    | 5                  | 9.5                    |                                  | 1 [68]          |
| n-Hexane                                              | 110-54-3   | 50                 | 180                    |                                  | 1 [68]          |
| Hydrogen bromide                                      | 10035-10-6 |                    | 6.7                    |                                  | 8 [69]          |
| Hydrochloric acid                                     | 7647-01-0  | 2                  | 3                      |                                  | 1 [68]          |
| Hydrogen cyanide (as CN) <sup>b.</sup>                | 74-90-8    | 0.9                | 1                      |                                  | 1 [68]          |
| Hydrogen sulfide                                      | 7783-06-4  | 5                  | 7.1                    |                                  | 1 [68]          |
| iso-Butanol                                           | 78-83-1    | 100                | 310                    |                                  | 1 [68]          |
| Isopropyl alcohol                                     | 67-63-0    | 200                | 500                    |                                  | 1 [68]          |
| Isopropyl benzene (Cumene) <sup>b.</sup>              | 98-82-8    | 10                 | 50                     |                                  | 1 [68]          |
| Methanol <sup>b.</sup>                                | 67-56-1    | 100                | 130                    |                                  | 1 [68]          |
| 1-Methoxy-2-propanol acetate (PGMEA)                  | 108-65-6   | 50                 | 270                    |                                  | 1 [68]          |
| 2-Methylaziridine (Propyleneimine) <sup>b.</sup>      | 75-55-8    | 2                  | 5                      |                                  | 3 [68]          |
| Methyl acetate                                        | 79-20-9    | 200                | 620                    |                                  | 1 [68]          |
| Methylethylketone (MEK) <sup>b.</sup>                 | 78-93-3    | 200                | 600                    |                                  | 1 [68]          |
| Methyl isobutyl ketone (MIBK) <sup>b.</sup>           | 108-10-1   | 20                 | 83                     |                                  | 1 [68]          |
| Methyl methacrylate                                   | 80-62-6    | 50                 | 210                    |                                  | 1 [68]          |
| N-Methylpyrrolidone (NMP) <sup>b.,c.</sup>            | 872-50-4   | 10                 | 40                     |                                  | 1 [68]          |
| Naphthalene <sup>b.,c.</sup>                          | 91-20-3    | 0.4                | 2                      |                                  | 1 [68]          |
| Nitric acid                                           | 7697-37-2  | 1                  | 2.6                    |                                  | 9 [69]          |
| Nitrogen dioxide                                      | 10102-44-0 | 0.5                | 0.95                   |                                  | 1 [68]          |
| Ozone                                                 | 10028-15-6 | 0.1                | 0.2                    |                                  | 3 [68]          |
| Phenol <sup>b.,c.</sup>                               | 108-95-2   | 2                  | 8                      |                                  | 1 [68]          |
| Potassium permanganate (as Mn)                        |            |                    |                        |                                  |                 |
| Inhalable fraction (I) <sup>d.</sup>                  | 7722-64-7  | ---                | 0.2 (I)                |                                  | 10 [69]         |
| Respirable fraction (R) <sup>f.</sup>                 |            | ---                | 0.02 (R)               |                                  |                 |
| Propylene oxide                                       | 75-56-9    | 1                  | 2.4                    |                                  | 1 [68]          |
| Selenium                                              | 7782-49-2  |                    | 0.05 (I) <sup>d.</sup> |                                  | 1 [68]          |
| Selenium dioxide (as Se)                              | 7446-08-4  |                    | 0.05 (I) <sup>d.</sup> |                                  | 11 [69]         |
| Crystalline silica (quartz)                           | 14808-60-7 | ---                | 0.1 (R) <sup>f.</sup>  |                                  | 12 [69]         |
| Styrene                                               | 100-42-5   | 20                 | 86                     |                                  | 1 [68]          |
| Sulfur dioxide                                        | 7446-09-5  | 0.5                | 1.3                    |                                  | 1 [68]          |
| Sulfuric acid                                         | 7664-93-9  |                    | 0.1 (I) <sup>d.</sup>  |                                  | 1 [68]          |
| Tetrachloroethylene (Perchloroethylene) <sup>b.</sup> | 127-18-4   | 10                 | 69                     |                                  | 1 [68]          |
| Tetrafluoroethylene                                   | 116-14-3   | 2                  | 8.2                    |                                  | 13 [69]         |

| Substance                       | CAS No.                  | Requirement - OELs |     | Recommendation - Goal OELs | Source of limit |
|---------------------------------|--------------------------|--------------------|-----|----------------------------|-----------------|
| Trichloromethane <sup>b</sup> . | 67-66-3                  | 0.5                | 2.5 |                            | 1 [68]          |
| 1,2,4-Trimethylbenzene          | 95-63-6                  | 20                 | 100 |                            | 1 [68]          |
| Toluene <sup>b</sup> .          | 108-88-3                 | 50                 | 190 |                            | 1 [68]          |
| Xylene <sup>b</sup> .           | 1330-20-7 <sup>e</sup> . | 50                 | 220 |                            | 1 [68]          |

<sup>a</sup>parts per million by volume (ml/m<sup>3</sup>)

<sup>b</sup>potential for significant absorption through the skin

Compliance with an airborne limit alone is insufficient; prevent skin contact through appropriate technical, organizational and occupational hygiene measures. This marker is distinct from skin sensitization, and its absence does not mean that skin contact is safe.

<sup>c</sup>assess the sum of vapor and aerosol, in accordance with TRGS 900 remark 11.

For caprolactam, the particulate component is inhalable. Consult the cited source for all additional substance-specific notations

<sup>d</sup>I = inhalable fraction, corresponding to E (einatembare Fraktion) in German TRGS notation

<sup>e</sup>group or mixture with several CAS numbers

A displayed CAS number may identify a representative substance rather than the complete group.

<sup>f</sup>R = respirable fraction, corresponding to A (alveolengängige Fraktion)

The English and German letters refer to the same respective size fractions; this document uses I and R. EN 481:1993, Workplace atmospheres — Size fraction definitions for measurement of airborne particles, defines these fractions and does not establish exposure limits.

Sources for the limit values are:

1. TRGS 900, Arbeitsplatzgrenzwerte, January 2006 edition, last amended and supplemented by GMBI 2026, pp. 353–354, No. 16, 5 June 2026.
2. TRGS 910, Risikobezogenes Maßnahmenkonzept für Tätigkeiten mit krebserzeugenden Gefahrstoffen, February 2014 edition, last amended by GMBI 2026, pp. 354–355, No. 16, 5 June 2026, Annex 1.  
Requirement columns reproduce tolerance concentrations, recommendation column reproduces acceptance concentrations. These are cancer-risk concentrations, not safe thresholds. AGS substance-specific exposure–risk justifications provide the derivation; current Annex 1 supplies the numerical values.
3. OSHA, Occupational Safety and Health Standards, 29 CFR 1910.1000, Table Z-1, Limits for Air Contaminants, current text accessed 14 September 2026.  
Antimony trioxide is expressed as Sb. These entries are explicit exceptions to the TRGS 900 basis.
4. Austria, Grenzwerteverordnung 2025 (GKV), BGBl. II No. 253/2001, as amended by BGBl. II No. 339/2025, Annex I/2025, effective 31 December 2025.
5. Chromium(VI) compounds: TRGS 910, Annex 1, risk-based assessment benchmark of 0.001 mg/m<sup>3</sup> (1 µg/m<sup>3</sup>), inhalable fraction, expressed as Cr.  
It is not a conventional tolerance or acceptance concentration. CAS 1333-82-0 identifies chromium trioxide; the entry covers chromium(VI) compounds (See: 2 [68]).
6. Diisocyanates: TRGS 900, group entry measured as NCO, remarks 11, 12 and 37, implementing Directive (EU) 2024/869.  
Apply the limit to the total NCO mass from all diisocyanates present, combining vapor and aerosol. The transitional eight-hour limit is 0.010 mg NCO/m<sup>3</sup> through 31 December 2028. Do not apply the mass limit separately to each diisocyanate or convert it into a single ppm value. The group includes the six formerly listed substances and other diisocyanates. Respiratory and skin sensitization precautions and TRGS 430 also apply.
7. General dust: TRGS 900, section 2.4.  
The respirable value uses a reference density of 2.5 g/cm<sup>3</sup>; apply the source's density and scope provisions. The general dust limits do not replace substance-specific limits for toxic, sensitizing or carcinogenic dusts (See: 1 [68]).

8. Hydrogen bromide: TRGS 900 specifies  $6.7 \text{ mg/m}^3$  without a ppm value, with peak factor 1(I) and remark 13 (a health-based value could not be derived). No calculated ppm value is added here (See: [1 \[68\]](#)).
9. Nitric acid: TRGS 900 remark 16 specifies a 15-minute short-term limit only:  $1 \text{ ppm} / 2.6 \text{ mg/m}^3$ . These values must not be interpreted as an eight-hour TWA (See: [1 \[68\]](#)).
10. Potassium permanganate: TRGS 900 entry for manganese and its inorganic compounds. Both inhalable and respirable limits apply, expressed as Mn. The permanganate-specific peak factor is 1(II) (See: [1 \[68\]](#)).
11. Selenium dioxide: TRGS 900 entry for inorganic selenium compounds, remark 10. The inhalable mass concentration is expressed as Se, not as selenium dioxide (See: [1 \[68\]](#)).
12. Crystalline silica: Directive 2004/37/EC, Annex III, as amended by Directive (EU) 2017/2398, specifies  $0.1 \text{ mg/m}^3$  for respirable crystalline silica dust. The CAS number shown identifies quartz. The German TRGS 559 assessment benchmark of  $0.05 \text{ mg/m}^3$  respirable must be observed where applicable.
13. Tetrafluoroethylene: Safe Work Australia, Workplace exposure limits for airborne contaminants, November 2025 edition, Appendix A, p. 44: eight-hour TWA  $2 \text{ ppm} / 8.2 \text{ mg/m}^3$ .

## 4 bluesign glossary

### 4.1 Terms, definitions and abbreviations

#### A

|                          |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| accepted                 |                   | <p>Status of a <i>basic chemical</i> that conforms with bluesign's process for the assessment of the <i>CIL</i></p> <p>Antonym: not accepted</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Adsorbable Halogen (AOX) | Organic Compounds | Refers to a group of organohalogen compounds that can be adsorbed onto activated carbon. AOX includes chlorinated, brominated, and iodinated organics.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| agent                    |                   | <p>A company that either sells <i>consumer products</i> to a brand or develops consumer products on behalf of a brand, usually a non-<i>System Partner</i></p> <p>Synonym: agency</p>                                                                                                                                                                                                                                                                                                                                                                                                                  |
| apparel                  |                   | <p>A category of textile <i>consumer products</i> with which people cover their bodies except for footwear. An individual item within this category is called a <i>garment</i>.</p> <p>Examples: Trousers, shorts, skirts, dresses, men's suits, shirts, jackets, coats, outdoor and sports clothing, socks, lingerie, underpants, workwear, protective wear, and apparel accessories such as scarves, gloves, hats, ties</p>                                                                                                                                                                          |
| article                  |                   | <p>A product placed on the market by manufacturers and converters, which is composed of one or more <i>materials</i> given a specific shape, surface or design.</p> <p>Examples: Fabrics, zippers, thread, membrane, buttons</p>                                                                                                                                                                                                                                                                                                                                                                       |
| assembler                |                   | <p>A company that cuts, sews and assembles components to manufacture <i>consumer products</i></p> <p>Related processes:</p> <ol style="list-style-type: none"> <li>1. Business processes <ol style="list-style-type: none"> <li>a. <i>converting</i></li> <li>b. <i>subcontracting</i></li> <li>c. <i>commission manufacturing</i></li> </ol> </li> <li>2. Production processes <ol style="list-style-type: none"> <li>a. consumer product manufacturing</li> <li>b. consumer product assembling</li> </ol> </li> </ol> <p>Synonym: garment manufacturer</p> <p>See Also <i>material supplier</i>.</p> |

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ATEX                            | The ATEX directives are two of the EU directives describing the minimum safety requirements for workplaces and equipment used in explosive atmospheres                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>B</b>                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| B2B                             | <p>Short for: business-to-business</p> <p>Describes commercial transactions and relationships between one company and another, rather than with individual consumers</p> <p>Compare with: <a href="#">B2C</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| B2C                             | <p>Short for: business-to-consumer</p> <p>Describes commercial transactions and relationships between one company and individual consumers, rather than with another company</p> <p>Compare with: <a href="#">B2B</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| banned                          | <p>Status of a chemical product from non-<a href="#">System Partner</a></p> <p>Banned rated chemical products do not conform with bluesign's process for the assessment of the <a href="#">CIL</a> and must be eliminated from all production processes</p> <p>Antonym: <a href="#">tolerated</a></p>                                                                                                                                                                                                                                                                                                                                                                                                       |
| BAT Reference Documents (BREF)  | <p><a href="#">BAT</a> Reference Documents (known as BREFs) are drafted for each sector with the aim of establishing best available techniques for all relevant industrial processes, as well as the associated emissions levels, operating conditions and monitoring requirements for minimising industrial waste and pollution to air, water and land. All BAT reference documents can be found on the <a href="#">European Commission's website</a>.</p> <p>A chapter of these BREFs (the so-called BAT conclusions) is legally binding within four years of their adoption.</p> <p>(Source: <a href="#">European Environment Agency</a>)</p> <p>See Also <a href="#">Best Available Techniques</a>.</p> |
| Best Available Techniques (BAT) | <p>The most environmentally effective and economically viable proven techniques within each industrial sector covered by the European Industrial Emission Directive (IED 2010/75/EU), agreed in a procedure known as the 'Sevilla process' led by the European Commission's Joint Research Centre in Seville, Spain.</p> <p>(Source: <a href="#">European Environment Agency</a>)</p> <p>The <a href="#">bluesign System</a> supports the implementation of BAT at all levels of the supply chain</p> <p>See Also <a href="#">BAT Reference Documents</a>.</p>                                                                                                                                              |
| black rating                    | Rating of a chemical product from a <a href="#">bluesign System Partner</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

Black-rated chemical products do not conform to the *bluesign Criteria* for bluepass Products and must be eliminated from the manufacturing process

Compare with: *blue rating, grey rating*

bluepass Product

A product that has been created using certified processes, that has met the requirements of the bluesign Criteria for product registration, and that carries the bluesign trademark. They can be:

1. **bluepass Chemical Product**

Certification mark for chemical products produced through processes that meet *bluesign Criteria for processing chemical products* and have fulfilled the *bluesign Criteria for bluepass Products*. Listed on the *bluesign Finder*.

2. **bluepass Article**

Certification mark for intermediate articles (fabrics, accessories, trims) produced through processes that meet *bluesign Criteria for processing articles and B2B consumer products* and have fulfilled the *bluesign Criteria for bluepass Products*. Listed on the *bluesign Guide*.

3. **bluepass Consumer Product**

Certification mark for finished consumer goods (apparel, denim, home textile, equipment, footwear) produced through processes that meet *bluesign Criteria for processing B2C consumer products* and have fulfilled the *bluesign Criteria for bluepass Products*. Listed on the *bluesign Guide*.

Formerly known as: *bluesign Approved, bluesign Product*

See Also ???TITLE???

bluesign  
Assessment

Company

An evaluation of business and/or production processes for their conformity with *bluesign Criteria*. It is valid for one year. Measures for continuous improvement are evaluated.

If applicable, it includes *on-site assessments* of production sites.

Types of Company Assessments include:

1. Initial assessment: The first company assessment conducted upon joining the bluesign System
2. Follow-up assessment: An annual company assessment to monitor the progress since the previous company assessment (only for companies that have reached the status "Criteria conformance")
3. Re-assessment: A regular comprehensive company assessment after the initial assessment in defined time intervals (i.e. three years) to renew the certificate
4. Additional assessment - An ad-hoc assessment necessary due to a change in scope of assessment, e.g. new processes, new facilities, expired company assessment

Formerly known as: Screening and Audit

bluesign Criteria

A set of evaluation requirements for

1. the assessment of companies and their processes ("company assessments"):
  - a. bluesign Criteria for processing chemical products: valid for *bluesign System Partner* chemical suppliers and their processes
  - b. bluesign Criteria for processing articles and B2B consumer products: valid for *bluesign System Partner* material suppliers and assemblers; and their processes
  - c. bluesign Criteria for processing B2C consumer products: valid for *bluesign System Partner* brands and their processes
2. the assessment of a product:
  - a. bluesign Criteria for bluepass Products: valid for *product registration*, i.e. of bluepass Chemical Products, bluepass Articles and/or bluepass Consumer Products

bluesign Product

Former bluesign mark for labelling of consumer products which are registered in bluesign Guide

See Also [bluepass Product](#).

bluesign System

The bluesign System is a comprehensive solution for businesses at all levels of the textile supply chain seeking to certify, report, and improve their impact on people and the planet. It does so by providing brands, assemblers, material suppliers and chemical suppliers a structured approach to sustainability, chemical management, and impact reduction across their value chain.

The bluesign System encompasses the evaluation of a company to enter the bluesign System as a System Partner and access the option for *product registration* upon Criteria conformance, and the continual improvement through a trusted partnership with bluesign.

bluesign System Black Limits (BSBL)

The BSBL specify threshold limits for chemical substances in finished chemical products, such as auxiliaries or dyes. The BSBL substances with rating "Usage Ban" shall be not intentionally used in the manufacturing of chemical products, articles.

It is designed to cover the ZDHC Manufacturing Restricted Substance List (MRSL). The BSBL is revised annually.

Downloads available on bluesign.com: [Downloads](#)

bluesign System Partner

A legal entity with a valid bluesign Certificate, which includes holding a valid System Partner agreement and attaining the *bluesign Status* of Criteria conformance

bluesign System Substances List (BSSL)

The BSSL specifies consumer safety limits for chemical substances in articles.

It is designed to cover the AFIRM RSL and the AAFA RSL. The BSSL is revised annually.

Downloads available on bluesign.com: [Downloads](#)

bluesign Tool

Web-based application for *bluesign Chemical Assessment* and rating of chemical products

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| brand                         | <p>A company that is the originator of the product delivered to the end-consumer (e.g. apparel, equipment) and owner of any associated label/trademark</p> <p>In the case of promotional wear, the licensee (i.e. promotional wear company) is considered the brand and not the licensor</p> <p>Related process:</p> <ol style="list-style-type: none"> <li>1. Business processes <ol style="list-style-type: none"> <li>a. <i>converting</i></li> <li>b. <i>subcontracting</i></li> <li>c. due diligence</li> <li>d. product certification</li> </ol> </li> </ol> <p>See Also <i>licensee</i>.</p>                                                                                                                                                                                                                                                                                       |
| business process              | <p>Structured sequence of related activities essential for business operations and management. A business process does not transform inputs into outputs (i.e. products). At bluesign, the following business processes are in scope:</p> <ol style="list-style-type: none"> <li>1. <i>product stewardship</i> only</li> <li>2. <i>rebranding</i></li> <li>3. <i>toll manufacturing</i></li> <li>4. <i>converting</i></li> <li>5. <i>subcontracting</i></li> <li>6. <i>commission manufacturing</i></li> <li>7. due diligence</li> <li>8. product certification</li> </ol> <p>Compare with: <i>production process</i></p>                                                                                                                                                                                                                                                                 |
| <b>C</b>                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| certificate of analysis (CoA) | <p>A document which a chemical supplier generates for each run or batch of shipped products. It provides business customers with information related to product quality, purity, and conformance to product requirements</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| certified                     | <p>The term "certified" refers to either</p> <ul style="list-style-type: none"> <li>• processes assessed to conform to the bluesign Criteria, the output of which are <i>B2B</i> products that are eligible for <i>product registration</i></li> <li>• consumer-facing <i>registered</i> products assessed to conform to the <i>bluesign Criteria</i> by an approved third-party <i>conformity assessment body</i></li> </ul> <p>Products eligible for product certification are:</p> <ul style="list-style-type: none"> <li>• <i>chemical products</i> that will be consumer-facing, e.g. via labelling on consumer product or for end-consumer use <ul style="list-style-type: none"> <li>• for industrial use in the textile, accessories and leather industry</li> <li>• for direct use in the textile manufacturing process</li> <li>• chemical intermediates</li> </ul> </li> </ul> |

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   | <ul style="list-style-type: none"> <li>• for end-consumer use in textile care</li> <li>• <i>articles</i> that will be consumer-facing, e.g. via labelling on consumer product or for end-consumer use</li> <li>• textile articles for industrial use at all processing levels (e.g. man-made fibres, yarns, woven fabrics)</li> <li>• finished leather articles for industrial use</li> <li>• accessories for industrial use (e.g. zippers, buttons)</li> <li>• textile articles and accessories for end-consumer use (e.g. repair kits)</li> <li>• <i>B2B</i> and <i>B2C consumer products</i> in the following categories: <ul style="list-style-type: none"> <li>• <i>apparel</i>, including denim apparel</li> <li>• <i>home textiles</i></li> <li>• <i>equipment</i></li> <li>• <i>footwear</i></li> </ul> </li> </ul> |
| chemical assessment               | <p>There are two types of chemical assessments bluesign conducts that do not relate to <i>product registration</i>:</p> <ol style="list-style-type: none"> <li>1. chemical assessment of the <i>Chemical Inventory List</i> (CIL)</li> <li>2. chemical assessment of the <i>Material Inventory List</i> (MIL)</li> </ol> <p>Compare with: <i>bluesign Chemical Assessment</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Chemical Inventory List (CIL)     | Overview of chemicals used at the site which informs on the chemicals in use, the volume, storage places, hazard statements etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Chemical Oxygen Demand (COD)      | A critical water quality parameter that measures the total amount of oxygen required to chemically oxidize organic and inorganic pollutants in wastewater.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| chemical product                  | <p>A commercial product placed on the market by chemical suppliers, which can be a chemical substance or a mixture of chemical substances, and can be for industrial use or end-consumer use</p> <p>Synonym: chemical</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Chemicals Change Management (CCM) | The goal of bluesign System Partner manufacturers to use only registered chemicals at the site by a gradual chemical substitution process                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| chemical supplier                 | <p>A company that under its own trade name markets chemical products, such as auxiliaries, dyestuffs and other chemical products, for the production of textiles, leather and/or accessories. A chemical supplier may be a manufacturer, a formulator or a rebreander of chemical products. A producer of chemical products that directly uses the produced chemicals for downstream processing of articles is also considered to be a chemical supplier.</p> <p>Related processes:</p> <ol style="list-style-type: none"> <li>1. Business processes <ol style="list-style-type: none"> <li>a. <i>product stewardship</i> only</li> <li>b. <i>rebranding</i></li> <li>c. <i>toll manufacturing</i></li> </ol> </li> <li>2. Production processes</li> </ol>                                                                  |

|                                |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                |  | <ul style="list-style-type: none"> <li>a. chemical manufacturing with product stewardship</li> <li>b. chemical manufacturing without product stewardship</li> <li>c. chemical recycling</li> </ul>                                                                                                                                                                                                                                                                                                                                           |
| CMR                            |  | Carcinogenic, mutagenic or toxic for reproduction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| commission manufacturing       |  | <p>Performing specific manufacturing processes and/or services, such as coating, lamination, cutting, sewing, laundering, finishing, or embroidery on behalf of another company without taking ownership of the goods</p> <p>Commission manufacturing requirements and recommendations are covered by the relevant production <i>process</i> for material suppliers.</p> <p>Compare with: <i>subcontracting, toll manufacturing</i></p>                                                                                                      |
| consumer product               |  | <p>A product placed on the market by brands for consumer use</p> <p>Categories: <i>apparel</i>, denim, <i>home textile</i>, <i>equipment</i>, <i>footwear</i></p> <p>Example: A jacket, a pair of jeans, a pair of sneakers</p>                                                                                                                                                                                                                                                                                                              |
| converting                     |  | <p>Buying and selling products which are registered in the Guide under own brand name and own responsibility. The properties of the original products are not modified. Changes to lot sizes or packaging are common. These products may be textile articles (at all processing levels), finished leather articles and/or accessories as well as consumer products.</p> <p>The process converting includes the requirements and recommendations for <i>subcontracting</i> for material suppliers.</p> <p>Compare with: <i>rebranding</i></p> |
| <b>D</b>                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| distributor                    |  | An independent company or person that buys products from a manufacturer or supplier and resells them to businesses, such as retailers or other businesses, rather than directly to end consumers                                                                                                                                                                                                                                                                                                                                             |
| DMF                            |  | N,N-Dimethylformamide (CAS 68-12-2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| down and feather manufacturing |  | <p>Processing already pre-washed and sterilized down and feather for final products. Processing steps may include amongst others washing, drying, sorting, blending and packaging of down and feather.</p> <p>Poultry processing and slaughterhouses are out of scope.</p>                                                                                                                                                                                                                                                                   |
| <b>E</b>                       |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| EHS                            |  | Environment, Health & Safety                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| embellisher                    |  | <p>A company adding print, embroidery or other decoration to a garment</p> <p>Synonym: decorator</p>                                                                                                                                                                                                                                                                                                                                                                                                                                         |

equipment Examples: tents, backpacks, luggage, climbing ropes, hammocks, umbrellas, sleeping bags, sleeping pads, handbags, camping chairs, rooftop tents, strollers, car seats for kids, bicycle trailers, personal flotation devices, yoga mats, and similar articles

## F

fiber manufacturing The process of creating and developing fibers from chemicals and raw materials, e.g. spinning.

This may include upstream processes, e.g. polymer manufacturing and pulp production, or even monomer manufacturing and downstream fiber processing to filament or staple fiber yarns and other mechanical processes such as texturizing.

Five Freedoms The Five Freedoms are internationally recognized animal welfare standards, which outline the essential conditions for the physical and mental well-being of animals under human care. The five freedoms are:

1. Freedom from Hunger and Thirst: By ready access to fresh water and a diet to maintain full health and vigor.
2. Freedom from Discomfort: By providing an appropriate environment including shelter and a comfortable resting area.
3. Freedom from Pain, Injury, or Disease: By prevention or rapid diagnosis and treatment.
4. Freedom to Express Normal Behavior: By providing sufficient space, proper facilities, and company of the animal's own kind.
5. Freedom from Fear and Distress: By ensuring conditions and treatment which avoid mental suffering.

Source: [World Organisation for Animal Health](#)

flame ionization detector (FID) A scientific instrument that measures analytes in a gas stream. It is frequently used as a detector in gas chromatography.

footwear Examples: street shoes, sport shoes, boots, and similar articles

## G

Global Harmonized System (GHS) Globally Harmonized System of Classification and Labelling of Chemicals is an internationally agreed-upon system created by the United Nations. It is designed to replace the various classification and labeling standards used in different countries by using consistent criteria for classification and labelling on a global level

greenhouse gas (GHG) Greenhouse gases are a group of gases contributing to global warming and climate change. The Kyoto Protocol covers the following seven:

- the non-fluorinated gases:
  - carbon dioxide (CO<sub>2</sub>)
  - methane (CH<sub>4</sub>)
  - nitrous oxide (N<sub>2</sub>O)
- the fluorinated gases:
  - hydrofluorocarbons (HFCs)

- perfluorocarbons (PFCs)
- sulphur hexafluoride (SF<sub>6</sub>)
- nitrogen trifluoride (NF<sub>3</sub>)

Converting them to carbon dioxide equivalent (CO<sub>2</sub>e) makes it possible to compare them and to determine their individual and total contributions to global warming.

(Source: [Eurostat](#))

## H

### hazardous waste

Waste with one or more of the following properties:

- flammable
- reactive
- corrosive
- toxic

or other physical, chemical, or biological characteristics that may pose a potential risk to human health or the environment. For hazardous waste, specific local definitions may apply.

### home textile

A category of textile [consumer products](#) which people use at home

Examples:

- Bath linen such as bath towels, beach towels, wash towels, face towels/cloths, hand towels, washing mitts, bath sheets, bathrobes, bath-mats and toilet pedestal mats
- Bed linen such as bed sheets, pillowcases, valance sheets, cot sheets, blankets, bed scarves/partial coverlets
- Kitchen textiles such as tea towels, oven gloves/mitts, potholders, aprons, and tea cozies
- Table linen such as tablecloths, non-disposable table napkins, fabric place mats/settings, non-disposable table runners, as well as cushion covers used for kitchen chairs
- Household textile items typically used in the living room, such as cushions (including floor cushions), throw pillows, cushion covers and sofa throws, rugs, moveable floor coverings, curtains

## I

### ILO Core Conventions

The eight ILO Core Conventions are:

1. the Forced Labour Convention, 1930 (No. 29),
2. the Abolition of Forced Labour Convention, 1957 (No. 105),
3. the Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87),
4. the Right to Organise and Collective Bargaining Convention, 1949 (No. 98),
5. the Equal Remuneration Convention, 1951 (No. 100),
6. the Discrimination (Employment and Occupation) Convention, 1958 (No. 111),
7. the Minimum Age Convention, 1973 (No. 138), and
8. the Worst Forms of Child Labour Convention, 1999 (No. 182).

(Source: [International Labour Organisation](#))

## K

KPI Key Performance Indicator

## L

LEV Local Exhaust Ventilation

licensee A company that has been granted permission to use a brand name or IP to produce and/or market products in exchange for a royalty fee

See Also [promo distributor](#).

## M

Material Inventory List (MIL) Overview of materials used to create a company's products

materiality assessment A structured process used to identify, evaluate, and prioritize the environmental, social, and governance (ESG) issues that are most significant ("material") to an organization and its stakeholders

material supplier A company that supplies textile articles (at all processing levels), leather and/or accessories. Not all material suppliers have [production sites](#).

Related processes:

1. Business processes
  - a. [converting](#)
  - b. [subcontracting](#)
  - c. [commission manufacturing](#)
2. Production processes
  - a. [fiber manufacturing](#)
  - b. yarn manufacturing
  - c. textile manufacturing
  - d. consumer product manufacturing
  - e. consumer product assembling
  - f. plastic part manufacturing
  - g. fabricated metal part manufacturing
  - h. [down and feather manufacturing](#)
  - i. footwear manufacturing
  - j. leather manufacturing

See Also [assembler](#).

## N

nonconformity (NC) A deviation from bluesign Criteria requirements. Nonconformities can be identified during initial assessments, re-assessments or quality assurance activities.

## O

|     |                                |
|-----|--------------------------------|
| OHS | Occupational Health and Safety |
|     | Synonym: OH&S                  |

## P

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PEC                                        | Predicted Environmental Concentrations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Per- and polyfluoroalkyl substances (PFAS) | <p>Bluesign references the PFAS definition as stated in the general restriction proposal for PFAS in the European Union, which in turn follows the definition of the OECD.</p> <p>Common types include:</p> <ul style="list-style-type: none"> <li>• PFOA: Perfluorooctanoic acid (CAS 335-67-1)</li> <li>• PFOS: Perfluorooctanesulfonic acid (CAS 1763-23-1)</li> </ul> <p>Sometimes inaccurately referred to as: PFC (Perfluorocarbons)</p>                                                                                                                                                                                                                                                                                                                                                                                                  |
| PNEC                                       | Predicted no-effect concentration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| PPE                                        | Personal protective equipment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| production process                         | <p>A specific type of operational process focused strictly on transforming inputs into outputs (i.e. products). At bluesign, the following production processes are in scope:</p> <ol style="list-style-type: none"> <li>1. chemical manufacturing with product stewardship</li> <li>2. chemical manufacturing without product stewardship</li> <li>3. chemical recycling</li> <li>4. <i>fiber manufacturing</i></li> <li>5. yarn manufacturing</li> <li>6. textile manufacturing</li> <li>7. consumer product manufacturing</li> <li>8. consumer product assembling</li> <li>9. plastic part manufacturing</li> <li>10. fabricated metal part manufacturing</li> <li>11. <i>down and feather manufacturing</i></li> <li>12. footwear manufacturing</li> <li>13. leather manufacturing</li> </ol> <p>Compare with: <i>businesss process</i></p> |
| product registration                       | products made with certified processes and assessed to conform with the <i>bluesign Criteria</i> may be registered in the bluesign Finder (chemical products) or bluesign Guide (articles, consumer products)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| product stewardship                        | Responsible and ethical management of products and their packaging at all stages of the lifecycle with a view to minimize their health, environmental and safety impacts. One of the main pillars that supports product stewardship is <i>input stream management</i> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| promo distributor                          | A company that sources, customizes, and sells promotional products to businesses for marketing purposes. They act as an intermediary between manufacturers and clients.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## Q

## R

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ramsar Site      | A wetland of international importance designated under the Convention on Wetlands                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| REACH            | Registration, Evaluation and Authorization and Restrictions of Chemicals (EU regulation 1907/2006)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| rebranding       | <p>There are two types of rebranding process:</p> <ul style="list-style-type: none"> <li>• Rebranding of <a href="#">registered</a> products: Purchasing chemical products which are registered in the Finder from a chemical supplier for registering in the <a href="#">bluesign Finder</a> and distributing them under own brand name and on own responsibility. The properties of the original products are not modified. Changes to lot sizes or packaging are common.</li> <li>• Rebranding of non-registered products: Purchasing products from a non-bluesign supplier for registering in the <a href="#">bluesign Finder</a> and distributing them under own brand name and on own responsibility. The properties of the original products are not modified. Changes to lot sizes or packaging are common.</li> </ul> <p>Compare with: <a href="#">converting</a></p> |
| registered       | <p>The term "registered" refers to products created using certified processes and assessed to be conformant with the <a href="#">bluesign Criteria</a></p> <p>See Also <a href="#">bluesign Product</a>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| renewable energy | <p>Energy derived from non-fossil sources that are naturally replenished on a human timescale</p> <p>Examples include:</p> <ul style="list-style-type: none"> <li>• renewable electricity (e.g. solar, wind, hydropower, geothermal energy)</li> <li>• other renewable energy sources that avoid significant adverse environmental or social impacts, such as deforestation, harmful land-use change, or competition with food production</li> </ul> <p>Energy Attribute Certificates (EACs) are certificates that track the attributes of renewable energy. One EAC represents one megawatt-hour (MWh) of renewable electricity.</p>                                                                                                                                                                                                                                          |
| requirement      | Requirements are to be fulfilled without deviation by a company before they can join the <a href="#">bluesign System</a> as a <a href="#">System Partner</a> and place <a href="#">registered</a> products on the market                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| RTO              | Regenerative Thermal Oxidizer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

## S

|                         |                                                                                                                                                                                                                                   |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Data Sheet (SDS) | A standardised document for hazard communication of chemical products. It provides comprehensive information on the hazards of a substance or mixture, and gives guidance on safe handling, storage, transport, use and disposal. |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                 |           |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------|-----------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                 |           |  | Synonym: Material Safety Data Sheet (MSDS)                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| SBTN AR3T                       |           |  | SBTN action hierarchy: Avoid, Reduce, Regenerate, Restore and Transform<br><br>See Also <a href="#">???TITLE???</a> .                                                                                                                                                                                                                                                                                                                                                                                                |
| Science Based Network (SBTN )   | Target    |  | SBTN is a group of organizations guiding organization to set science-based targets for nature, including biodiversity, water, land, and oceans. SBTN is designed to complement <i>SBTi</i> ; companies are expected to set climate targets via SBTi as part of their science-based targets for nature, allowing them to address climate and nature goals holistically.                                                                                                                                               |
| Science Based initiative (SBTi) | Targets   |  | A corporate climate action organization that enables companies and financial institutions worldwide to play their part in combating the climate crisis. SBTi develops standards, tools and guidance which allow companies to set <i>GHG</i> emissions reductions targets in line with what is needed to keep global heating below catastrophic levels and reach net-zero by 2050 at latest.<br><br>(Source: <a href="#">SBTi</a> )                                                                                   |
| SOP                             |           |  | Standard operating procedure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| subcontracting                  |           |  | Placing orders to other companies for performing specific manufacturing processes and/or services, such as coating, lamination, printing, cutting, sewing, laundering, finishing, or embroidery<br><br>Requirements and recommendations for subcontracting are covered by the process <i>converting</i> for material suppliers, and the process <i>due diligence</i> for brands.<br><br>Compare with: <i>commission manufacturing, toll manufacturing</i>                                                            |
| Substance of Concern (SVHC)     | Very High |  | A substance may be proposed as an SVHC if it meets one or more of the following criteria: · it is carcinogenic; · it is mutagenic; · it is toxic for reproduction; · it is persistent, bio accumulative and toxic according to the criteria set out in Annex XIII to the REACH Regulation (PBT substances) · there is "scientific evidence of probable serious effects to human health or the environment which give rise to an equivalent level of concern"; such substances are identified on a case-by-case basis |

## T

|                    |  |  |                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Technical Guidance |  |  | Technical Guidance refers to documents that provide explanation and guidance on how to comply to the bluesign Criteria.<br><br>These include documents that were previously categorised as such: <ol style="list-style-type: none"> <li>1. Guidelines</li> <li>2. Guidance sheets</li> <li>3. Fact sheets</li> <li>4. Best practice sheets</li> </ol> |
|--------------------|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**IMPORTANT:**

Separate *Technical Guidance* documents may contain the verbal forms "shall", "required", "necessary" or other expressions conveying requirements. Such provisions in separate documents are not to be regarded as bluesign Criteria requirements. Only the requirements expressly stated in this bluesign Criteria document apply.

You can find a list of all Technical Guidance documents online on [bluesign Cube](#).

TNFD

Taskforce on Nature-related Financial Disclosures

TNFD LEAP

A structured framework to

- Locate,
- Evaluate,
- Assess and
- Prepare

for nature-related issues, developed by TNFD

See Also ???TITLE???

TOC (off-gas)

A sum parameter for organic load measured by *FID*

tolerated

Status granted to chemical products from non-System Partner; temporary use is allowed and re-evaluated during each company re-assessment. The conditions of which can be found in the *Technical Guidance* "Input Stream Management at Manufacturers".

Antonym: *banned*

toll manufacturing

Placing orders to other companies for producing chemical products while specifications regarding purchase of raw materials and/or formulation recipes are made by the chemical supplier

Compare with: *subcontracting*, *commission manufacturing*

trader

A company that (amongst other activities) buys and sells products without modifying them and without changing the original trade name. These products can be chemicals or materials.

A trading company cannot join *bluesign System* as a System Partner. It is the obligation and responsibility of the buying company to check and ensure that a traded product conforms with the original product.

Also: trading

**U**

usage range A                      Articles with next to skin use and baby-safe articles

**V**

volatile organic compound (VOC)                      Any organic compound having at 293.15 K a vapor pressure of 0.01 kPa or more, or having a corresponding volatility under particular conditions of use

**W**

wet processing                      A series of chemical and mechanical treatments applied to raw, unfinished "grey" fabrics to enhance their appearance, performance, and durability.

This stage is the most water-intensive and chemically complex part of textile manufacturing, generating significant wastewater that requires careful treatment to mitigate environmental impact.

A non-exhaustive list of examples:

- pretreatment (e.g. singeing, desizing, scouring, and bleaching)
- coloration (e.g. dyeing, printing)
- finishing (e.g. application of anti-creasing or water repellency finishing)
- other processes (e.g. mercerizing, laundry)

WWTP                      Wastewater Treatment Plant

Synonym: Effluent Treatment Plant (ETP)

**Z**

zero-liquid discharge (ZLD)                      A wastewater management strategy that eliminates liquid waste and maximizes water usage efficiency, intending to reduce wastewater efficiently and produce clean water that is suitable for reuse (e.g., irrigation)