bluesign® CRITERIA for production sites

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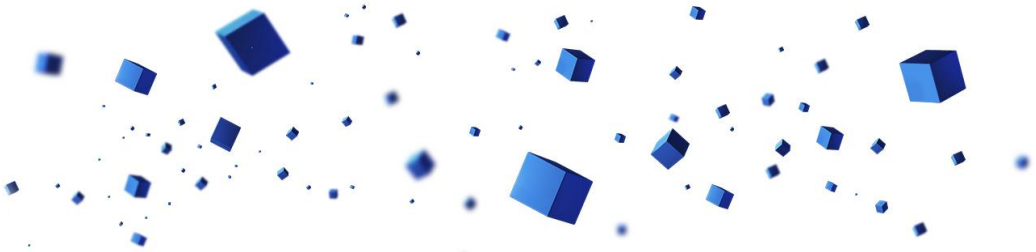

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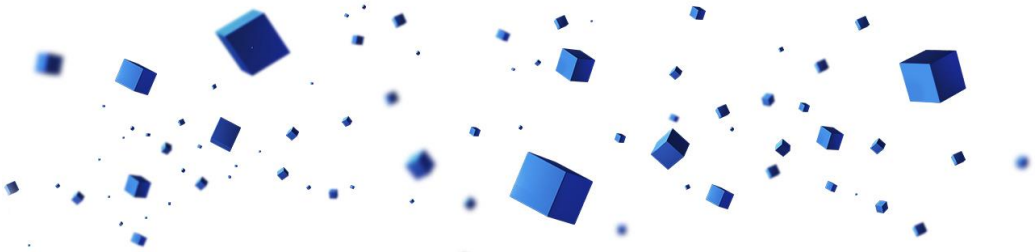


1 Scope

1.1 General

This document defines the general bluesign® CRITERIA for production sites.

For several sectors and/or processes, further requirements are defined as ANNEX documents to this document and in bluesign® Guidelines and bluesign® Guidance Sheets, which have a prescriptive character and are binding.

If no relevant supplementary document exists, only the general criteria for production sites are applicable.

1.2 Application

This document complements the bluesign® SYSTEM PARTNER agreement. It is applicable to production sites within the scope of the bluesign® SYSTEM at all tiers of the supply chain.

Where a section of this document is not relevant it should be omitted. The ANNEX documents for specific production types (see Chapter 19) are essential to the application of this document and should, where applicable, always go together. All requirements relevant for the specific sectors and listed in the ANNEX documents complement and/or supersede the requirements defined in this document.

Following a clean factory approach, the complete production site shall comply with the criteria at hand.

In the case of companies with multiple production sites, only products that originate from a BLUESIGN assessed and compliant site are eligible for a bluesign® approval (for chemical suppliers and fiber manufacturing, see the relevant ANNEX documents for further details).

If, due to the production method of a production site, two or more annex documents can be applied to a site, it is at discretion of BLUESIGN to select a suitable set of requirements from these documents.

2 Definitions

2.1 Production site

A stationary technical unit that is under the control of a legally independent entity, including any directly related activities that have a technical connection to the activities carried out at the site that could have an effect on emissions.

2.2 Manufacturer

A company that produces textile articles (at all processing levels), leather and/or accessories.

2.3 Chemical supplier

A company that under its own trade name markets chemical products, such as auxiliaries, dyestuffs or other chemical products, for the production of textiles, leather and/or accessories. A chemical supplier may be a manufacturer, a formulator or a rebrander 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.

For a comprehensive list of terms and abbreviations, please refer to the document *bluesign® glossary.*

3 Focus areas and guiding principles

3.1 Focus areas

The bluesign® SYSTEM has three focus areas:

Figure 3.1: The three focus areas of the bluesign® SYSTEM

3.1.1 People

Production processes along the textile and textile related supply chain, as well as the use of textiles, can be harmful to people:

- **Workers** at production sites can be exposed to dangerous workplace situations – characterized by the handling of hazardous substances or other dangerous processes. Statistics of accident insurers and the International Labour Organization (ILO) list numerous occupational accidents, diseases and even fatal accidents for industrial operations in every country. The workplace situation is largely defined by the employer. It is an essential duty of a bluesign® SYSTEM PARTNER to provide a safe workplace for the employees, which requires continual and systematic actions in the framework of a company OH&S program, and to ensure compliance with ILO fundamental principles and rights at work.
- **Consumers** wear and use textiles. Through close contact, hazardous substances may enter the body and harm consumers' health. By applying chemicals change management and excellent process control and following restrictions and bans for substances in chemical products and in articles, the bluesign® SYSTEM PARTNER ensures the best possible consumer safety.

3.1.2 Environment

Various processes are used along the textile and textile related supply chain and may cause emissions, which can have detrimental effects on the environment. Through input stream management, chemicals management and applying BAT, the emissions to water, air and soil shall be kept as low as possible by the bluesign® SYSTEM PARTNER.

3.1.3 Resources

As the world's population continues to grow and available resources are shrinking in some regions, it is becoming not only an environmental but also an ethical consideration to effectively and efficiently manage

- Water
- Energy
- Chemicals
- Raw materials

Responsible management of resources with the focus on preservation of human health and a clean environment shall be the goal of all bluesign® SYSTEM PARTNERS. A proactive strategy for clean and transparent production shall be promoted. This requires systematic and ongoing effort for continual improvement. The way towards sustainable production cannot and should not be taken alone –collaboration of the entire supply chain network is necessary to minimize the product's life cycle impact.

3.2 Guiding principles

At the production site(s) of a bluesign® SYSTEM PARTNER, all activities shall be guided by the following three principles:

1. The activities performed at the production site shall not have harmful impact on human beings, animals, plants, soil, aquatic bodies or the atmosphere.
2. A high level of human health and environmental protection shall be ensured, with the goal of achieving sustainable development.
3. A bluesign® SYSTEM PARTNER shall be aware of Best Available Techniques (BAT) that are relevant for the industry and shall implement these techniques to continually improve environmental performance.

In light of the current global environmental status and advancing climate change, this means especially:

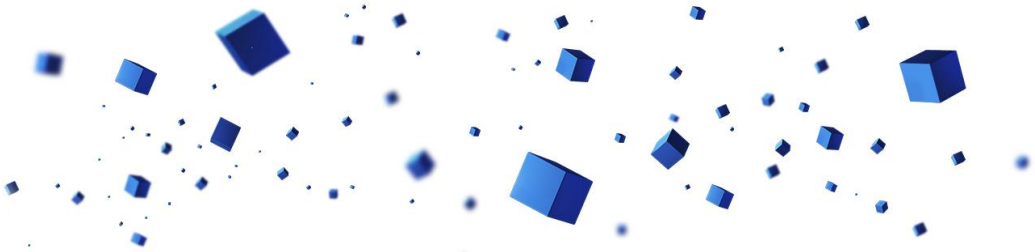
- Supporting the UN Sustainable Development Goals (SDG)
- Reducing Greenhouse Gas (GHG) emissions

Respective plans and targets shall be defined and implemented.

4 Legal compliance

As a minimum requirement, the bluesign® SYSTEM PARTNER shall comply with applicable local and national labor legislation and other legislation in the fields of social standards (e.g. minimum wage, maternity protection), Occupational Health and Safety (OH&S), environment and consumer safety. Therefore, awareness and understanding of these requirements, as well as an overview with regard to current laws and regulations, should be systematically addressed by the management system. Valid permits shall be available at the site.

Legally binding requirements that are stronger or more detailed than the bluesign® CRITERIA will supersede these, and vice versa.



5 Social responsibility

5.1.1 Social responsibility

Generally, all bluesign® SYSTEM PARTNERS shall prohibit all forms of physical and verbal abuse, intimidation, sexual harassment and abusive punishment or disciplinary measures. A bluesign® SYSTEM PARTNER shall establish clear employment relationships by providing a written employment contract to each employee and shall work against corruption in all its forms.

Further, a bluesign® SYSTEM PARTNER shall confirm, by agreement, compliance with the following principles and rights at work from selected International Labour Organization (ILO) conventions:

I. Employment is freely chosen in accordance with the Forced Labour Convention (No. 29) and the Abolition of Forced Labour Convention (No. 105)
   - There is neither forced or compulsory labour in the sense of work or service, nor are workers obliged to store their identity papers with their employer. Workers shall be free to terminate their employment after reasonable notice.

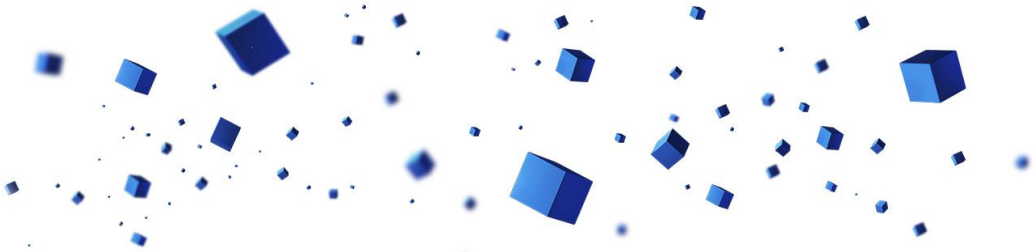
II. Freedom of association and the right to collective bargaining are respected in accordance with the Freedom of Association and Protection of the Right to Organise Convention (No. 87) and the Right to Organise and Collective Bargaining Convention (No. 98)
   - For furthering and defending their interests, workers or employers are enabled to form organizations. Also, a worker shall be able to join an organization while being protected against acts of anti-union discrimination in respect of their employment by their employer, that has an open attitude towards the activities of trade unions and their organisational activities.

III. Child labour shall not be used, in accordance with the Minimum Age Convention (No. 138) and the Worst Forms of Child Labour Convention (No. 182)
   - There shall be no new recruitment of child labour. Further, persons younger than 18 years shall not be employed at night or in hazardous conditions.

IV. No excessive working hours are allowed in accordance with the Hours of Work (Industry) Convention (No. 1) and the Weekly Rest (Industry) Convention (No. 14)
   - Working hours shall never exceed 48 hours per week and shall comply with national laws or with common industry standards, if they provide greater protection. Voluntary overtime shall neither exceed 12 hours per week, nor be demanded on a regular basis, nor represent a significantly higher likelihood of occupational hazards and shall be compensated appropriately

V. No discrimination is practised, in accordance with the Equal Remuneration Convention (No. 100) and the Discrimination (Employment and Occupation) Convention (No. 111)
   - There is no form of discrimination, e.g. in hiring, compensation, access to training, promotion, termination or retirement, based on race, caste, ethnic or national origin, nationality, religion, age, disability, gender, marital status, sexual orientation, union membership, political affiliation, social background, or any other condition that could give rise to discrimination.

VI. Equality of all women in the workforce shall be promoted and pregnancy shall be protected in accordance with the Maternity Protection Convention (No. 183)



- Women – during and after pregnancy – shall be ensured appropriate health protection, including a maternity leave of at least 15 weeks, leave in case of illness or complications, medical benefits as well as employment protection and non-discrimination.

These requirements and conventions shall be applicable to the working conditions of employees, irrespective of full-time, part-time or under a subcontract. Further, they illustrate the basic requirements for social responsibility, and BLUESIGN

- generally, encourages all bluesign® SYSTEM PARTNERS;

and

- obliges Tier 1 bluesign® SYSTEM PARTNERS as well as bluesign® SYSTEM PARTNERS during whose bluesign® ASSESSMENT an obvious abuse of one of the principles and rights is identified;

to implement a production site-wide social responsibility program, which is assessed by the

- ☐ Fair Wear Foundation
- ☐ SA8000 – Social Accountability International (SAI)
- ☐ Fairtrade Textile Production
- ☐ Fair Labour Association (FLA)
- ☐ World Fair Trade Organization

and/or

- ☐ participating in the Social Labor Convergence Project (SLCP)

and which is appropriately followed up for continual improvement. In case the social responsibility program is assessed by an organization, that is not listed above, and the system partner can show equivalency, it is at discretion of BLUESIGN to accept this assessment.

6 Management system

6.1 General aspects

Management systems improve overall performance of a company, provide a sound basis for sustainable development initiatives and help to reduce costs and the risk of litigation. An appropriate management system shall be installed, maintained and continually improved. It shall cover the following aspects:

- Quality
- Environment
- Resource conservation and energy management
- Occupational Health and Safety (OH&S)
- Chemicals management

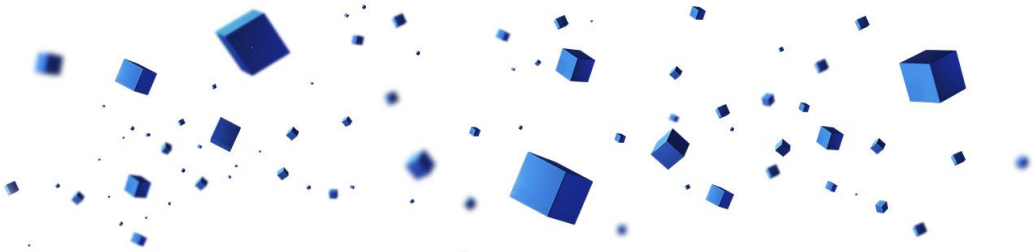
A management system shall address risks and opportunities associated with its context and objectives and shall in general include the following aspects:

- Policy (publicly available)
- Measurable objectives
- Plan-do-check-act cycle (Figure 6.1)
- Clear definition of responsibilities and allocation of adequate resources
- Audits
- Continual improvement
- Annual review by top management

Figure 6.1: PDCA (plan-do-check-act) cycle

Each system partner shall define a set of standard operating procedures to be followed to meet the predefined objectives and ensure that the processes are running correctly.

bluesign® SYSTEM PARTNERS with chemicals and processes of high relevance to humans and the environment are especially advised to seek third-party management system certification.



6.2 Quality Management

Quality Management (QM) directly contributes to customer satisfaction and the reputation of the company.

It is important to put a focus on:

- Structured management
- Quality objectives
- Traceability
- Reduction of rejects and substandard quality
- Increase of first-time right production
- Analytical verification of product quality
- Documented information

A certified Quality Management system according to ISO 9001 is recommended and can be a good basic structure for other management systems or an integrated management system.

6.3 Environmental management

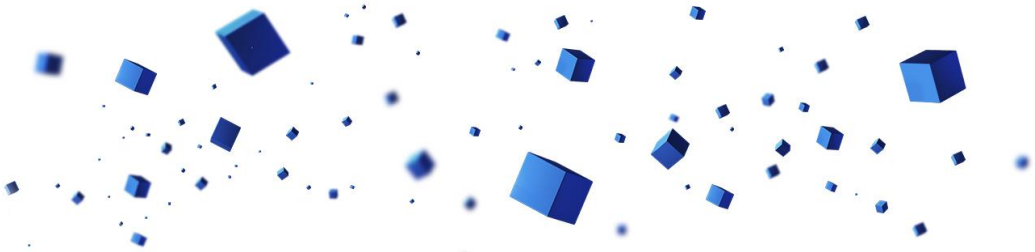
A properly implemented environmental management system helps reduce the impact of production on the environment.

It shall be focused on:

- Objectives related to environmental aspects
- Implementation of input stream management and chemicals management principles
- Structured collection of statistics on resource consumptions and emissions
- Suitable metering and collection of data
- Definition of suitable eKPIs for the main consumptions, environmental performance parameters and emissions
- Increasing environmental competences in the company
- How emissions (air, water, waste, noise, etc.) are managed, monitored and compliance is ensured
- Environmental performance as a selection criterion when purchasing machines and installations
- Avoiding unproductive energy consumptions
- Increasing the share of renewable energies

Key information on sustainability shall be compiled in an annual sustainability report by the company.

A certified Environmental Management System according to ISO 14001 is recommended. In the case of energy intensive manufacturing operations, ISO 50001 certification is additionally recommended.



6.4 OH&S management

An OH&S management system helps go beyond compliance in Occupational Health and Safety by addressing OH&S issues in a systematic way.

It shall be focused on:

- Objectives related to Occupational Health and Safety aspects
- Workplace risk assessments
- Management of hazardous substances in the workplace
- Selection of low hazard chemicals and regular substitution check
- Increasing OH&S competences in the company

A certified OH&S management system according to ISO 45001 is recommended, especially for operations involving hazardous chemicals or other significant hazards.

6.5 Housekeeping & maintenance

6.5.1 Housekeeping

Effective housekeeping can eliminate workplace hazards, thus contributing to overall better functioning of the production site and increased efficiencies. Employees should understand that routine housekeeping is a priority and that each person is accountable for making sure that the production area remains clean and orderly throughout the workday.

Effective housekeeping is an ongoing activity, with the workers' training playing an essential role. It shall apply to all facilities at the production site.

The bluesign® SYSTEM PARTNER shall ensure that

- the facility is kept clean;
- housekeeping allows appropriate functioning of processes;
- responsibilities are clearly defined.

6.5.2 Maintenance

Maintenance of a production site shall be ensured in all cases. Facilities and installations shall be checked regularly, and in case of an incident or a malfunction (leakage, spill, etc.), remedial maintenance shall be performed.

Maintenance activities shall apply to:

- General facilities (production area, offices, laboratory)
- Machinery and equipment
- Storage areas
- Pipes, tanks and floorings
- Prevention of leaks
- Electrical installations
- Sanitary facilities
- Emergency systems
- Sensors, measuring and metering devices
- Prevention of unnecessary emissions

7 Input stream management (manufacturer)

7.1 General

Suitable input stream management and adequate process control shall be in place to ensure that

- the final product is of defined quality;
- the manufacturing process conforms to the legal requirements and the bluesign® CRITERIA;
- both the manufacturing process and the final product have the least possible impact on people and the environment.

Good sourcing criteria can prevent the input of unwanted substances into the manufacturing process. A system partner shall perform regular quality assurance procedures and seek alternative materials and processes that minimize environmental, resource and human impacts. System partners are encouraged to apply the substitution principle (especially for CMR (carcinogenic, mutagenic or toxic to reproduction), PBT (persistent, bioaccumulative and toxic), vPvB (very persistent and very bioaccumulative) endocrine disruptors, sensitizing, or substances of similar concern) by preferably:

- avoiding activities with hazardous substances;
- replacing hazardous substances by substances, formulations or procedures which under the respective conditions are not harmful or less harmful to health and the environment.

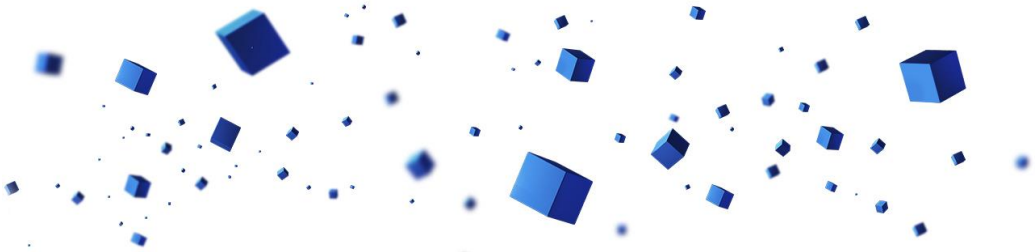
To establish and maintain appropriate input stream management, a system partner shall define all necessary actions, including

- Development of sourcing criteria (supplier evaluation, purchase specifications)
- Definition of responsibilities and procedures for purchasing of chemicals and other inputs (e.g. intermediates and materials)
- Establishment of supplier management (e.g. supplier list and rating)
- Establishment of incoming control procedures to ensure that the type, quality and quantity of delivered materials match the order
- Establishment and maintenance of raw material control, including a testing program

If the bluesign® APPROVED inputs are sourced from trading companies and the original trade name of the material is retained, the bluesign® SYSTEM PARTNER shall ensure the authenticity of the material by appropriate supplier verification.

Furthermore, a bluesign® SYSTEM PARTNER shall:

- ensure that water for potable purposes complies with national and local hygiene and quality standards; if no standards are defined, the WHO Guidelines for drinking water quality shall be observed;
- apply measures for site/process internal recycling of materials;
- purchase recycled materials if possible;
- prefer (certified) organic sources in the case of materials from natural sources;
- take animal welfare into consideration in the case of materials from animal sources (respective certification recommended).



7.1.1 Recycled materials

Recycled materials can primarily reduce resource consumption and should therefore be used by bluesign® SYSTEM PARTNERS where feasible. Recycled materials can be pre-consumer recycled or post-consumer recycled. Especially in the second case it must be kept in mind that there is little knowledge about the sources and hardly any traceability. Therefore, these inputs shall – under the responsibility of the system partner – be subject to an input testing program for typically expected contaminations. A suitable test plan and documentation shall be generated.

7.1.2 Management of non-bluesign® APPROVED materials

It shall be the goal of each bluesign® SYSTEM PARTNER to ensure that all material inputs (fiber, yarn, raw fabric, membrane, etc.) which are used to manufacture a bluesign® APPROVED article are also certified as bluesign® APPROVED. A continually growing network of bluesign® SYSTEM PARTNERS from all parts of the supply chain facilitates this approach.

7.1.2.1 Tolerating non-bluesign® APPROVED materials

Currently, not all types of materials (raw materials or intermediates) have adequate bluesign® APPROVED equivalents available.

It is therefore at the discretion of BLUESIGN to decide whether non-bluesign® APPROVED materials can be tolerated.

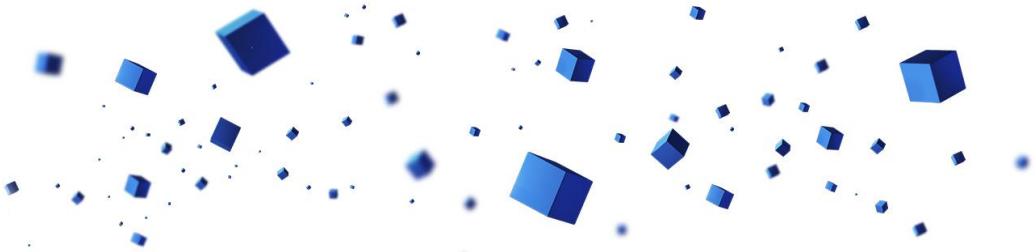
Tolerating such inputs can only be granted if appropriate input stream management at the production site is implemented and maintained, a high level of consumer safety is assured, and safe material handling at the manufacturer's site can be provided. Non-bluesign® APPROVED inputs can only be tolerated if a manageable amount of such materials is present and sufficient data is available.

A decision to tolerate a material depends particularly on the risk of contamination with restricted and banned substances. This risk varies depending on the material's composition and the material's source. In every case the manufacturer shall ensure by means of appropriate input control – for example, supplier evaluation and supplier selection, purchase conditions and a testing program – that the *BSSL - Consumer safety limits* are kept. In case of materials with known potential for consumer safety risks or OH&S risks, the manufacturer is responsible for obtaining all necessary supplementary data (SDS, TDS, further information and/or compliance declarations for the bluesign® CHEMICAL ASSESSMENT, test results, etc.) which allow robust conclusions regarding safe handling during manufacturing and end use.

7.1.3 Subcontracting

With the exception of subcontractors that produce the above-mentioned tolerated inputs, a manufacturer cannot subcontract another company to carry out processes which are relevant for bluesign® APPROVED materials.

Subcontractors who only perform mechanical and thermal processes may, at the discretion of BLUESIGN, be exempted from this rule.



8 Chemicals management (manufacturer)

The basis for adequate chemicals management at a manufacturing site is information provided by the chemical supplier. Therefore, the manufacturer shall ensure availability of

- SDS (Safety Data Sheet) for all chemicals and chemical products (current version)
- TDS (Technical Data Sheet)

The information on chemical products in use at the site shall be compiled in a Chemicals Inventory List (CIL).
The bluesign® CHEMICAL ASSESSMENT evaluates the chemical portfolio and gives clear advice for each chemical product by means of a rating (main categories blue, grey, black). The evaluation results help the manufacturer to close data gaps, replace chemical products which contain banned substances, and highlight the products for which process control determines the compliance of the final product.
If the manufacturer needs to replace products in its chemical product portfolio or wants to bring in new chemical products, the bluesign® FINDER, a comprehensive database of bluesign® APPROVED chemical products, helps to quickly find the right solution.

Since chemicals management is a cross-cutting issue, further aspects can be found in Chapters 11 to 14. See also *Guideline – Chemicals Management and Chemicals Change Management at manufacturers*.

8.1 Chemicals Change Management (CCM)

Using only bluesign® APPROVED chemical products, raw materials and intermediates from bluesign® SYSTEM PARTNERS shall be the goal. Non-system partner chemistry shall be phased-out or replaced as soon as possible. Taking into consideration that a phase-out or replacement of non-system partner chemical products is often linked to time consuming actions such as

- adaption of recipes;
- lab and production trials;
- additional lab testing;
- newly adapted sourcing; and
- creation/expansion of the BLUESIGN network;

the change in the chemical product portfolio of a manufacturer can only be done "step by step.".

The bluesign® CRITERIA reflect this situation by means of a stepwise phase-out procedure for non-system partner chemical products during the implementation phase of the bluesign® SYSTEM (see *Guideline – Chemicals Management and Chemicals Change Management at manufacturers*).

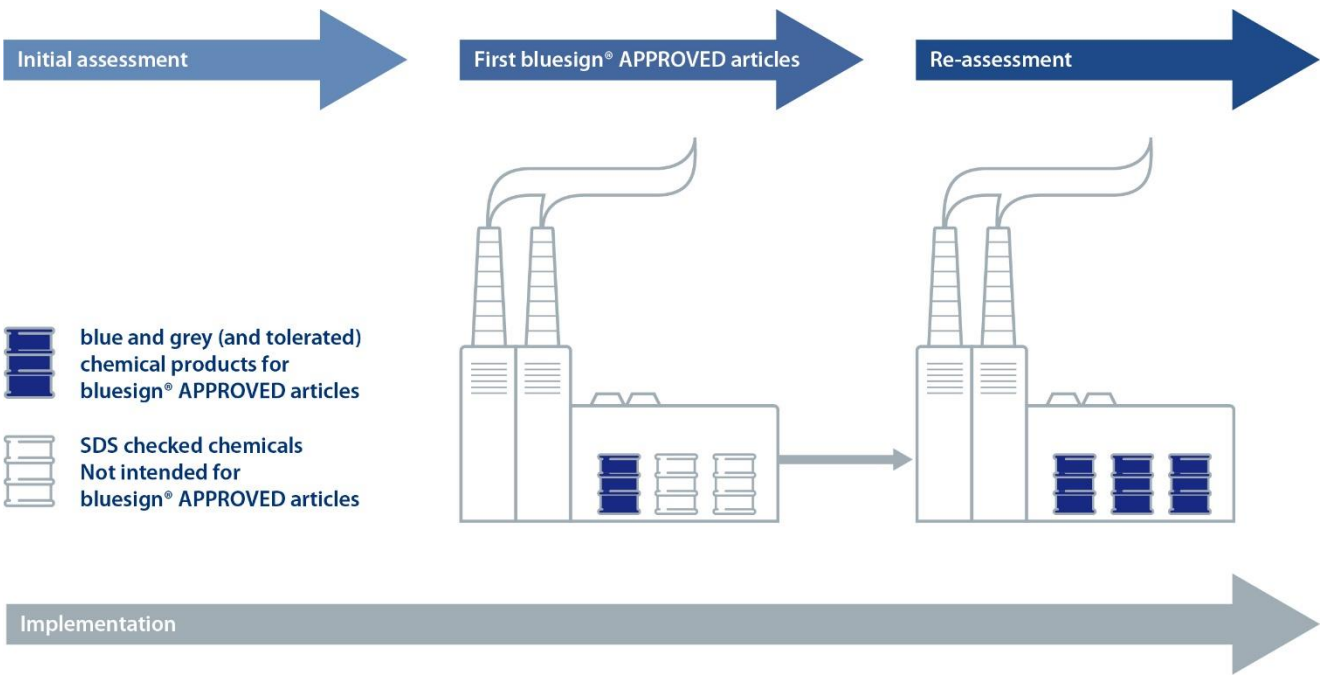


Figure 8.1: Replacement of non-system partner chemical products in the beginning of a bluesign® SYSTEM PARTNERSHIP

The bluesign® FINDER, with its positive list of bluesign® APPROVED chemical products, plays an important role in the chemical substitution process and shall be implemented in the chemicals management system of every manufacturer.

8.1.1.1 Tolerating non-bluesign® APPROVED chemicals

If – from a technical point of view – the bluesign® FINDER is missing an appropriate chemical product from a bluesign® SYSTEM PARTNER, a chemical assessment of a non-system partner chemical product can be performed exceptionally upon the decision of BLUESIGN. Chemical products compliant with the bluesign® CRITERIA for chemical assessment will be rated as "tolerated". Appropriate background data (reliable and meaningful SDS, test results and further information from the chemical supplier) defined by BLUESIGN is required.

9 Product Stewardship (chemical supplier)

Product Stewardship means taking responsibility for the manufactured products with the aim of minimizing any negative impacts they may have on the health and safety of workers or consumers or on the environment. The product stewardship requirements for chemical suppliers are defined in the *bluesign® GUIDELINE – Product Stewardship for Chemical Suppliers and ANNEX: Criteria for chemical supplier.*

An overview of all areas related to Product Stewardship is shown in

Figure 9.1.

Figure 9.1: Product Stewardship tasks in the chemical industry

Effective Product Stewardship is only achieved by means of an accurate understanding of the chemistry of the products and their hazard potentials, followed by communicating

- relevant information internally and considering when establishing different procedures at the production site (e.g. storage concept, production processes, work instructions, emergency procedures);
- relevant information to customers and suppliers / upstream and downstream all information necessary for responsible handling of the product.

10 Resource productivity

A bluesign® SYSTEM PARTNER shall strive for optimization of the quality and quantity of resources used. It is a prerequisite to choose and use the resources in a responsible way. Both ethical and environmental aspects shall be considered. To establish the status quo and to provide data for benchmarking, an annual review of key figures related to water, energy, raw materials and chemicals consumption, as well as wastewater, waste and CO_2 emissions, shall be performed. The acquired information shall serve as an indicator for targeted corrective actions and setting of environmental objectives.

10.1 Chemicals and other raw materials

Implementation of appropriate processes and their continual optimization shall enable the lowest possible use of chemicals and raw materials. In-house recycling can additionally minimize the consumption of resources. Appropriate input stream management shall enable the implementation of only good quality chemicals and raw materials (see Chapter 7 and 9).

10.2 Freshwater

It is of great importance that freshwater sources, consumption volumes and use purposes are known. Water conservation shall be part of the corporate policy, and the following main principles shall be adopted:

- Continual metering of freshwater consumption volume, at least at the company level
- Internal and external benchmarking of absolute and specific water consumption, at least on an annual basis and at the company level
- Awareness of and use of water saving technologies
- Reuse of cooling water
- Reuse of process water (if possible) and installing closed water circuits
- Water consumption shall be made a purchasing criterion when purchasing new machinery
- The economic, technical and legal feasibility of a water recycling system shall be evaluated for water intensive operations

10.3 Energy

Energy efficiency shall be a major focus of energy intensive operations. Furthermore, the energy needed to operate the installations shall be generated in a sustainable and resource conserving manner, with a preference for renewable energy sources. Energy saving and minimizing the company's carbon footprint shall be part of corporate policy.

The following main principles shall be adopted:

- Environmentally friendly fuel types shall be used, and the share of environmentally friendly fuels shall be increased continually; internal targets shall be defined and monitored
- Metering of energy usage on a monthly basis and at least at the company level; major consumption of machines, units and facilities shall be monitored separately (e.g. dryers, reactors, WWTP)

- Internal and external benchmarking of absolute and specific energy consumption and CO_2 emissions at least annually and at the company level
- Use of heat exchangers to recover residual thermal energy from water and off-gas
- Evaluation of co-generation (combined heat and power) for dye houses
- Use of excess production heat for heating of office buildings or for supply to external parties
- Use of indirect cooling instead of injection cooling
- Insulation of heated machines and pipes
- Reuse of steam condensate

11 Emissions

Untreated wastewater, polluted air and waste from industrial operations may harm ecosystems and cause health and safety problems for the workers and the surrounding communities. Appropriate installations (e.g. off-gas or wastewater treatment systems) and management procedures may prevent harmful emissions and help in achieving required emission limits at the production site.

Requirements (limits and monitoring obligations) of local/national authorities are to be fulfilled and valid discharge permits shall be available. However, when bluesign® limit values are stronger or more detailed than the national or local requirements, the national or local requirements will be superseded.

Installations used to prevent emissions or, where this is not practicable, to reduce emissions shall not shift pollution between the different environmental media.

Dilution of wastewater and off-gas streams with the intention to comply with wastewater or off-gas limits is not allowed.

11.1 Wastewater

11.1.1 General

At a production site, the following types of wastewater typically occur:

- Industrial (process) water, which results from production operations
- Domestic (canteen/sanitary) water
- Stormwater resulting from precipitation

All types of wastewater effluents shall be treated appropriately before being sent to the receiving water body.

Furthermore, a bluesign® SYSTEM PARTNER shall:

- Establish and maintain an inventory list of all wastewater sources
- Have a valid discharge permit for the respective type of wastewater and available discharge path
- Never discharge unused residual amounts of chemical products to the wastewater path
- Treat wastewater which contains oil and grease (e.g. compressor condensate, wastewater from canteen, runoff from fuel storage areas or parking areas, etc.) with oil separators
- Have suitable measures in place (e.g. extra retention basins) to prevent uncontrolled discharge of untreated or insufficiently treated wastewater in case of problems in production or with the on-site or off-site wastewater treatment plant (WWTP)

Two scenarios for wastewater treatment at the production site apply:

1. **Direct discharge:**
   i.e. (treated) wastewater discharged directly into a body of water (e.g. river, lake, sea, estuary, etc.). Typically regulated by national and local pollutant discharge legislation.
2. **Indirect discharge:**
   i.e. (untreated/pretreated) wastewater is sent to an industrial or publicly owned WWTP (wastewater treatment plant). Typically, WW parameters are regulated by permits/contracts with the WWTP.

11.1.2 Production wastewater management - direct discharge

Industry specific limit values for wastewater quality are provided in the relevant annexes to this document and shall be fulfilled by the company responsible for direct discharge to the receiving water body.

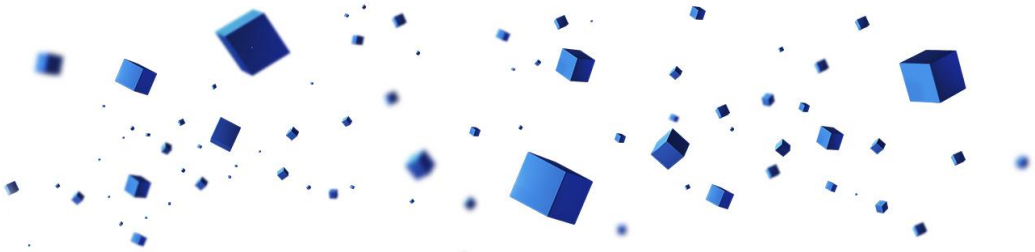
Furthermore, the following points shall be observed:

- The operator of the on-site wastewater treatment plant (manufacturer or third party) has adequate competences, and suitable technical equipment (including laboratory equipment) is available at the site.
- The design of wastewater treatment installations shall ensure that wastewater treatment is of sufficient quality, that the treatment types are chosen properly and their efficiency is at a high level, and that the environmental impact is minimized. If possible and practical, the high-loaded wastewater streams shall be collected and treated separately.
- Sludge resulting from the wastewater treatment operations shall be properly handled and managed. The choice of optimal sewage sludge treatment and disposal shall ensure that harmful substances are not transferred to humans or the environment (further details see Chapter 11.4) The wastewater resulting from sludge drying operations shall be returned to the WWTP .
- Soil and air contamination, as well as odor pollution resulting from on-site wastewater treatment operations, shall be avoided at all times.
- A flow chart and technical description of the WWTP shall be available.
- Treated wastewater from industrial operations shall generally not be used directly for irrigation. Only if the limit values for direct discharge in the respective category are met and a site-specific evaluation and permit by local authorities exists, is it possible to accept irrigation with treated wastewater as an exception. Accumulation of contaminants (e.g. heavy metals) has to be avoided.
- Controlled infiltration of industrial water to the subsoil is only allowed if covered by a valid permit from local authorities; the respective requirements for quality and quantity shall be met.

11.1.3 Production wastewater management - Indirect discharge

In the case of indirect discharge to an external WWTP (e.g. industrial or municipal sewage plant), the following measures shall be applied by the bluesign® SYSTEM PARTNER:

- Documentation on the external WWTP shall be available (address, process description, contract including limits for incoming wastewater, limits for final discharge to the receiving water body applicable to the WWTP)
- Limits according to contract shall be met
- If the wastewater contains contaminants which cannot be treated by the external WWTP, on-site pre-treatment for the respective parameters shall be performed
- Communication procedure in case of abnormal conditions of the discharged wastewater, including the contact person, shall be defined
- The final discharge of the external WWTP should not exceed the limit values of the bluesign requirements for direct discharge of the respective manufacturer category



11.1.4 Domestic sewage management

- Domestic sewage quality must in every case meet the local discharge criteria, and in case of combined treatment of industrial and domestic wastewater it must meet the applicable bluesign® CRITERIA (see *ANNEXES to the CRITERIA for production sites*)

If domestic sewage is not discharged together with industrial wastewater, the following regulations apply for system partners:

- Domestic sewage shall be treated using biological methods before discharging it to the aquatic body
- On-site septic tank system: septic tank effluent is not suitable for direct discharge and should be treated to reduce its polluting potential (e.g. by further biological treatment or a suitable drain field with appropriate percolation)
- Fecal sludge shall be collected and treated by third party disposal companies

11.1.5 Stormwater management

Every production site deals with stormwater runoff resulting from precipitation, drainage or other sources from various surfaces (e.g. roofs, concrete pavement and other impermeable surfaces).

Runoff from process areas may be contaminated and shall be prevented as far as possible – the remaining runoff shall be treated appropriately.

Runoff from areas without contamination shall be minimized by reducing the area of impermeable surfaces and allowing infiltration into the soil.

The stormwater system shall be separated from the production wastewater system. Surface retention and buffering systems may be necessary for sites with a high degree of sealing of the soil.

11.2 Air emissions

11.2.1 General

Reduction of air emissions and maintenance of an odor-free atmosphere with the goal of achieving the best possible air quality should be ensured.

Air emissions apply to:

- Captured emissions (emission ports) (e.g. stack emissions; can be treated or untreated)
- Fugitive emissions (emissions which are not captured but occur by evaporation during application, leaks, etc.)

bluesign® SYSTEM PARTNERS shall apply the following measures:

- Establish and maintain an inventory list of all emission ports (captured air emissions)
- Establish an inventory of ozone depleting substances at the site (including types and amounts)
- In case of relevant emissions, off-gas treatment systems need to be installed and operated properly
- Monitoring of emissions shall be conducted according to local/national legal requirements
- Compliance with local/national legal requirements shall be present and demonstrated

For fugitive emissions the following measures shall be applied:

- Substitution check (reduction of emission potential by change to low emission chemical products)
- Definition of a reduction plan (written plan including objectives and timelines)

11.2.2 VOC-relevant production sites

The use of organic solvents in certain activities gives rise to emissions of organic compounds into the air (VOC – Volatile Organic Compounds) which can be harmful to public health and/or contributes to the local and transboundary formation of photochemical oxidants in the boundary layer of the troposphere. This causes damage to natural resources and, under certain exposure conditions, has harmful effects on human health.

For bluesign® SYSTEM PARTNERS using organic solvents, the *ANNEX: VOC management* is applicable.

11.2.3 Emissions from power generation / boiler house

Emissions from power generation/boiler houses are amongst other composed of:

- CO_2
- CO
- NO_x
- SO_2
- Dust

The minimum requirements for emissions from power generation for different fuel types (power generations with a nominal capacity of more than 1 MW) are:

Parameter	Solid fuel	Liquid fuel	Gaseous fuel
Dust emissions [mg/m³]	80	125	---
NO_x emissions [mg/m³]	600	450	250
SO_2 emissions [mg/m³]	1400	400	40
Oxygen reference: solid fuel: 7%; liquid and gaseous fuel: 3%. One averaged scoring point per fuel. If more than one fuel is used, a weighted total average is calculated.			

Table 11.1: Emission limits for generation of thermal energy (according to *ANNEX: Rating criteria*)

For coal firing, the following goal for the emission of mercury (Hg, CAS 7439-97-6) and its compounds (expressed as Hg) shall additionally be observed:

- 0.25 g/h

or

- 0.05 mg/m³

The goal shall be to use low emission fuels, for example natural or liquid pressurized gas. In cases where heavy oil (sulphur content more than 1 %) or coal is used, an appropriate off-gas abatement system minimizing SO_2 and particle emissions shall be installed.

In case of a major revision or new installation of a coal-based steam generation facility, a technical and economic feasibility study for the use of alternative, more environmentally friendly fuels shall be conducted. It shall be the goal that after 2025 no new coal-based boiler houses shall be installed.

11.2.4 Odor

The odor intensity levels set by the local authorities are mandatory. Furthermore, valid neighborhood complaints shall also be evaluated and adequately followed up.

11.2.5 Biological hazards from aqueous cooling systems

Aqueous cooling and treatment systems (e.g. cooling towers, open recoolers, scrubber systems, etc.) which can release water droplets to the ambient air can pose a threat to human health by distributing hazardous bacteria and microorganisms (e.g. legionella) if they are not properly managed. Suitable control measures need to be in place.

11.2.6 Ozone Depleting Substances (ODS)

Several substances which have been used over the last decades in industrial production and equipment have been revealed as ozone depleting.

International conventions (*Vienna Convention* and *Montreal Protocol* and subsequent amendments) regulate the use of ODS and are implemented in national regulatory frameworks.

A bluesign® SYSTEM PARTNER shall:

- Keep an inventory of all ODS in use at the site (e.g. in cooling and air conditioning installations)
- Follow the national implementation regulations of the above-mentioned conventions and other applicable regulations for ODS
- Phase out and safely dispose of (by an accredited disposal company) banned ODS/cooling agents, and create phase out plans for ozone-depleting substances class II
- Not install equipment using ozone-depleting substances class I (CFCs, halons, 1,1,1 – trichloroethane (CAS 71-55-6), carbon tetrachloride (CAS 56-23-5), ethyl bromide (CAS 74-83-9) or hydrobromofluorocarbons (HBFCs)) (see also *BSSL* and *Guidance sheet - Greenhouse Gases and Ozone Depleting Substances (GHG&ODS))*
- Evaluate the use of equipment with environmentally friendly or natural cooling agents (selection with regard to GHG and ODS potential, as well as environmental and safety considerations)

11.2.7 Greenhouse gases (GHG)

Pursuant to the goal of the Paris Agreement (United Nations), a significant reduction of GHG emissions is necessary. System partners shall define and monitor their own objectives for GHG emissions reduction. The goal is to reduce GHG emissions by 30 % by 2030 (against a 2010 baseline) and reach net zero emissions around 2050.

11.3 Environmental noise

The environmental noise emission levels set by the local authorities are mandatory. If no local/national regulations exist, the following limits for noise at the factory boundary shall be observed:

Area	Laeq [dBA]	
	day	night
Mixed industrial area	65	55
Industrial area	70	70

Table 11.2: Limits for environmental noise (night: 10 pm to 6 am; measurement at the factory fence)
LAeq: Level A-weighted equivalent

Any neighborhood complaints shall also be respected and followed up.

Please refer to Chapter 12 for workplace noise levels.

11.4 Waste

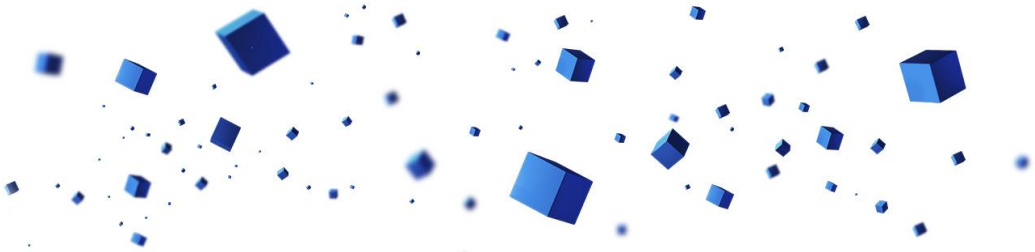
Each bluesign® SYSTEM PARTNER shall follow the waste management principle and shall prevent waste wherever possible:

Figure 11.1: Principle of waste management

11.4.1 Waste management

The following requirements apply:

- Compliance with national and/or local regulations pertaining to waste storage and transport shall be ensured
- Standard operating procedures for waste management shall be established at each production site
- A waste balance shall be generated on a yearly basis, including an overview of waste types, quantity, disposal methods, etc. The documents and reports, including third party records from waste management companies, shall be archived
- Packaging material shall be reduced; the use of returnable containers and recycled materials is strongly recommended
- Unavoidable waste shall be collected separately to enable re-use/recycling or to ensure safe disposal
- Workers shall be informed about the applicable waste management procedures
- Hazardous waste shall be stored separately from non-hazardous waste; storage areas for hazardous waste shall be defined
- Hazardous waste shall be disposed of separately from non-hazardous waste. Only licensed subcontractors shall be contracted for the transport and disposal of hazardous waste
- Disposal of waste shall ensure that contamination of soil and (ground) water is avoided
- Landfill shall be avoided as far as possible (if it cannot be avoided, only officially controlled landfill sites shall be used; no on-site landfill)



11.4.2 Disposal of sludge from wastewater treatment

The following requirements apply:

- Sludge types shall be properly classified and collected separately in suitable collection areas
- Sludge from industrial wastewater treatment should not be used in agriculture.
- Sludge shall not be disposed of in uncontrolled landfills
- Sludge from surface treatment of metals, chemical companies and operations involving fluorocarbons shall not be used in agriculture
- Sludge classified as hazardous waste shall be disposed of by an accredited disposal company
- For other sludge types, if they are intended to be used in agriculture, potential accumulation of heavy metals and other hazardous compounds shall be evaluated in advance
- Compile full information on the disposal of every sludge type

11.4.3 Waste incineration

Waste incineration shall only be applied for waste types that cannot be recycled. Waste incineration shall generally only take place in specified and officially accredited waste incineration plants.

Under the following conditions, on-site waste incineration can be tolerated as an exception:

- A permit for incineration which explicitly and precisely lists the waste types and conditions for incineration must be available
- An appropriate off-gas treatment system must be installed
- A temperature of 850°C (1100°C for waste with chlorine content above 1%) and a treatment time greater thantwo seconds shall be achieved by the incineration system
- Extensive and regular off-gas measurements, including the parameters dioxins and furans, must be conducted; the goal is to not exceed 0.1 ng/m³ for off-gas and 0.3 ng/L for wastewater discharge from exhaust gas cleaning
- Excellent know-how regarding the process management and process control must be demonstrated
- Appropriate disposal of ash can be demonstrated

11.5 Soil and groundwater contamination

11.5.1 Prevention

Contamination of soil and groundwater with chemicals shall be strictly avoided; therefore, flooring and underground tanks and pipes shall be in good order and regularly inspected (including documentation). If possible, underground installations shall be avoided to facilitate checking and maintenance procedures. Storage areas for hazardous chemicals shall be equipped with retention systems. Precautions for the rapid containment and safe removal of spills should be taken.

11.5.2 Historic cases (brownfields)

Information on previous use of the site and potential contamination should be collected. In case of suspicion, suitable soil and groundwater tests shall be conducted. In case of contamination, remediation plans shall be defined and implemented until a proper state/condition of the production site is restored.

Noncompliance situations with respect to local/national requirements without suitable and effective remediation measures cannot be accepted for bluesign® SYSTEM PARTNERS.

12 Occupational Health and Safety

12.1 General

A bluesign® SYSTEM PARTNER shall:

- Meet local/national OH&S requirements
- Clearly define OH&S responsibilities
- Provide initial OH&S training for the employees
- Keep detailed statistics and documentation of occupational health related incidents (near miss cases) and accidents
- Use this information in workplace risk assessments
- Create work instructions/SOPs including OH&S relevant aspects
- Use suitable pictograms for warnings and instructions to workers (e.g. ISO 7010 pictograms)
- Follow up every severe incident
- Conduct workplace atmosphere monitoring for relevant airborne hazardous substances
- Involve workers in the OH&S program
- Continually improve OH&S performance with the ultimate goal of zero incidents and occupational illnesses
- Demonstrate the integrity of building structures by means of compliance to local regulation or special expert assessments

Figure 12.1: Core elements of an OH&S program[1]

[1] www.osha.gov/shpguidelines

12.2 OH&S risk assessment

OH&S risk assessments are important tools to identify hazards (potential to cause harm) and risks (combination of the likelihood of a hazardous event or exposure to hazard and the severity of the outcome) and ultimately decide if a workplace is safe.

An OH&S risk assessment is a structured, dynamic and documented approach – to be conducted by a competent person (internal/external) – with the following main steps:

- Hazard identification (chemical/health, physical, biological, psychosocial)
- Assessment of the likelihood of potential hazardous events
- Assessment of the severity of potential hazardous events
- Concluding assessment of risk
- Derivation and definition of improvement measures
- Re-assessment (after improvements/changes and at regular intervals)

A bluesign® SYSTEM PARTNER is responsible for carrying out occupational health risk assessments and for establishing, if necessary, measuring programs to identify possible risks related to the release of hazardous substances or the threat of mechanical hazards to people and the workplace. In case of a potential risk, operation instructions and self-explanatory safety instructions with pictograms shall be posted at relevant work areas, appropriate personal protective equipment (PPE) shall be available and used when needed, and workers shall be educated and trained.

12.3 Hierarchy of controls

For all measures applied to improve the occupational health situation the hierarchy of controls shall be applied:

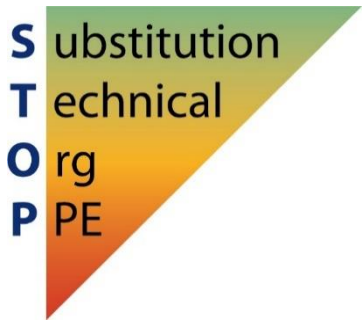
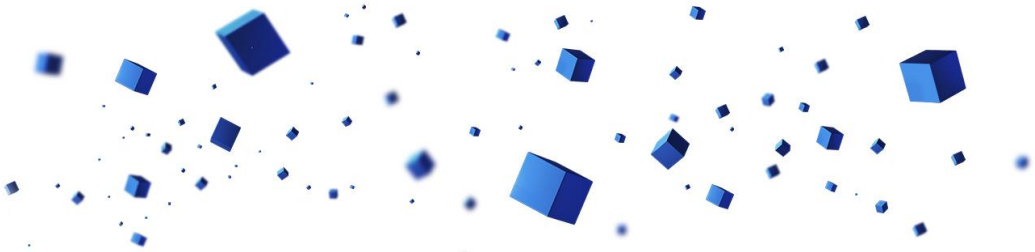


Figure 12.2: S.T.O.P principle. Hierarchie of controls

The effectiveness of providing a safe workplace for the worker is in descending order:

- Substitution: Replacing hazardous processes, materials, chemicals, etc. by less hazardous counterparts, e.g. replacing a solvent based formulation by a water-based formulation
- Technical: Technical measures – engineering controls, separating people from hazards, collective protective measures, e.g. housing or local exhaust ventilation.
- Org: Organizational measures – administrative controls to reduce the exposure of employees to hazards, e.g. instructions, changes of work organization, training
- PPE: Personal Protective Equipment –: providing suitable PPE to workers and training them to use and maintain it properly. Application of PPE shall be the last resort.

Measures shall be evaluated and applied from top to bottom.



12.4 Occupational hazards

Occupational hazards exist at every workplace. The following chapters give a systematic overview in order to support hazard/risk assessments. Furthermore, several mandatory measures are specifically defined.

12.4.1 Physical hazards

Physical hazards are:

- Electrical hazards (including electrostatic discharge (ESD))
- Radiation hazards (e.g. radioactive substances, laser light, UV)
- Processes with rotating machine parts, sharp edges, hot surfaces
- Fall hazards
- Heat/cold stress
- Forklift operation
- Improper stacking and unsecure loads
- Vibration hazards
- Noise hazards
- Gas under pressure

In order to measure identified detailed risk assessments as required by local regulations, a system partner shall in particular and in addition apply the following measures:

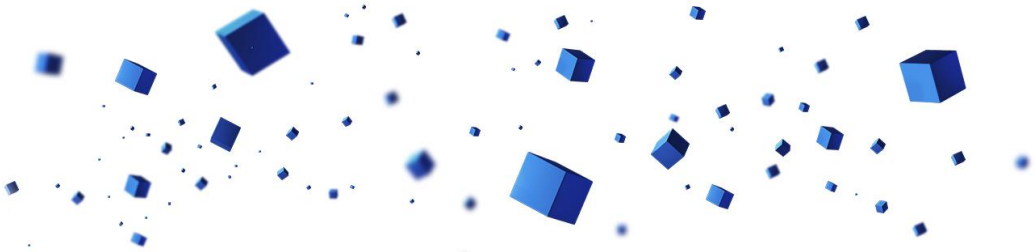
- Building structures shall be regularly inspected to ensure their proper functioning and maintenance
- Provide sufficient lighting of work areas to allow safe performance of production activities
- Determine noise relevant work areas
- Establish a noise register (including regular updates and updates in case of changes in production machinery)
- Noise protection areas shall be marked in an appropriate way (pictograms)
- Above a noise level of 80 dB(A), appropriate hearing protection shall be available.
- Above a noise level of 85 dB(A), hearing protection is mandatory.

12.4.2 Chemical hazards

Chemical hazards are rated and labeled according to the GHS as physical hazards (H-2xx), health hazards H-3xx), or environmental hazards (H-4xx).

A system partner shall in particular, and in addition to measures determined in detailed risk assessments and measures required by local regulations, apply the following measures:

- Ensure the availability of up-to-date versions of SDS for all hazardous chemicals used at the site for all relevant personnel
- Identify possible risks regarding the release of hazardous substances to the workplace and, if necessary, establish measuring programs. If measured values are close or exceed national limits or the limits set by BLUESIGN, appropriate improvement actions (regarding the hierarchy of controls, see Chapter 12.3) shall be initiated. The limits defined by BLUESIGN can be found in the *Guidance sheet - Occupational Exposure Limits*
- Inform on handling hazardous substances by means of clearly understandable safety instructions using pictograms in all relevant work areas
- Define and implement written SOPs regarding management of hazardous chemicals and materials
- Regularly check options for substitution of hazardous chemicals by less hazardous chemicals



- Regularly inspect and maintain safety equipment and installations
- Install appropriate air ventilation systems (general ventilation and LEVs) for production areas with a relatively high exposure risk
- Educate relevant personnel regularly with additional training following any incidents, and regularly practice drills

12.4.3 Biological hazards

Biological hazards are bacteria, viruses and communicable diseases. In industrial operations, the hygiene of water (especially hot water) is a permanent challenge. This applies especially – but not exclusively – to aqueous scrubber systems, evaporative cooling systems, cooling towers and sanitary hot water systems.

Here the risk for growth and spreading of hazardous bacteria and microorganisms (e.g. legionella) exists. Therefore, system partners shall have adequate installations, maintenance and measures to control.

13 Handling and storage of hazardous materials

The handling and storage of hazardous materials needs to be addressed in a structured way. The listed measures shall therefore be incorporated in the management system. Furthermore, a competent person shall be named as the responsible person for this topic.

13.1 Handling

For employees which work with chemicals, the system partner shall apply the following measures:

- Provide initial training on chemicals hazards and correct handling (document participation and success)
- Provide appropriate and suitable PPE and training for correct use (including work clothing)
- Supervise the use of PPE
- Where solid substances in powder form are handled (dyestuffs, reducing agents, etc.), appropriate precautions to minimize dust concentration at the workplace shall be installed
- If sensitizing substances are handled, skin contact and inhalation of the substances shall be strictly avoided
- Train employees on how to classify, collect and dispose of hazardous waste resulting from operations

13.2 Storage

A system partner shall

- Establish and maintain a Chemical Inventory List (CIL) of all hazardous materials handled, transported, used and stored at the site
- Conduct incoming materials inspection (delivery vs. order)
- Establish and maintain an appropriate storage concept, taking into account co-storage and segregation restrictions
- Determine well-defined and appropriately marked storage areas, and separate the storage area from the process area
- Perform an environmental and safety risk assessment of the chemical storage area(s)
- Follow instructions described in SDS for correct storage and handling of hazardous chemicals
- Ensure proper maintenance (cleanness, ventilation) of storage areas
- Ensure correct labeling of tanks, intermediate bulk containers, drums. etc. with GHS symbols and substance names
- Install retention measures (double walled containers, secure bunded tanks, and/or other means (retention ponds)) and, if appropriate, leakage monitoring devices to prevent contamination of the soil with liquid chemicals
- Use closed containers for storage of chemicals whenever possible
- Ensure that toxic chemicals are stored in locked areas

14 Emergency preparedness

14.1 General rules

A bluesign® SYSTEM PARTNER shall establish, implement and maintain procedures for response to potential emergency situations and potential accidents that can have an impact on the environment and the employees. A bluesign® SYSTEM PARTNER shall regularly test such procedures where practicable. Employees shall be regularly trained on all aspects concerning potential emergency cases.

Natural disasters such as earthquakes, flooding or storms shall also be considered as potential emergency situations.

The following equipment, installations and organizational precautions shall be established:

- Competent and officially certified first aiders (at least 5% of the employees; for manufacturing companies and departments 10% should be the goal; shift coverage shall be regarded)
- Emergency medical and personal information records of all employees
- First aid equipment (including special precautions (e.g. specific antidotes) if applicable)
- Appropriate fire extinguishers (regularly maintained)
- Fire hoses and sprinkler systems where appropriate
- Eye wash and emergency shower installations
- Spill kits (sorbent booms, absorbent material)
- Emergency exits (unblocked, unlocked, at least 2 per work area; panic proof where many people need to exit)
- Emergency lighting systems
- Alarm systems (smoke and fire detection, acoustic alarm system, visual alarm system)
- Assembly points
- Fire protection plans
- Evacuation plans
- Special protective equipment for hazardous material incidents
- Explosion protection
- Accident and incident records and statistics

All emergency measures shall be maintained and tested/evaluated at regular intervals for effectiveness and proper function.

14.2 Preparedness for major accident hazards

Major accidents at the production site (e.g. major emissions, fire or explosion) could endanger not only the workers but also the surrounding area and human settlements. Prevention of accidents and limitation of their consequences are therefore of high importance.

Production sites are regarded as major accidents hazards sites if national/regional regulations for major accidents hazards such as "Seveso III" directive (Directive 2012/18/EU), Control of major accident hazards regulations (COMAH) or equivalent apply.

In addition to regular measures for emergency preparedness, the following measures shall be applied:

- Identification of major accidents hazards and evaluation of preventive measures
- Evaluation of impact to the surroundings and local community and evaluation of prevention and mitigation measures
- Demonstrate preparedness for natural hazards (e.g. Earthquakes, flooding, etc.).
- Emergency plan agreed with local fire dept

- Routines established with local fire dept
- Trainings including local community
- Equipment for major hazards
- Measures approved by local authorities

If a company handles or produces hazardous chemicals in larger quantities and no local regulation concerning major accidents hazards apply, the "Seveso III" directive (Directive 2012/18/EU) and the respective threshold amounts (see Annex 1 of the directive) shall be used as a guideline.

15 Quality assurance

Every company has full responsibility for the products it markets to its customers.

Product Stewardship for a finished product starts for chemical suppliers and manufacturers with appropriate input stream management. Purchase of bluesign® APPROVED raw materials facilitates input stream management and increases product safety along the supply chain.

Nevertheless, the processes carried out at the production site also influence the quality of the finished product and impurity contents. This means that process inspection and final inspection are additional management tasks.

Appropriate packaging and shipping of finished products shall eliminate damage to products during storage and transport and shall prevent cross contamination.

Furthermore system partners shall support their customers with information so that purchased products are used in an appropriate way. If applicable, information on appropriate disposal of the product shall also be provided to the customer.

Especially in cases where compliance with BSSL can be only ensured by excellent process control (e.g. when solvents are in use), a manufacturer shall establish and maintain appropriate monitoring of finished products.

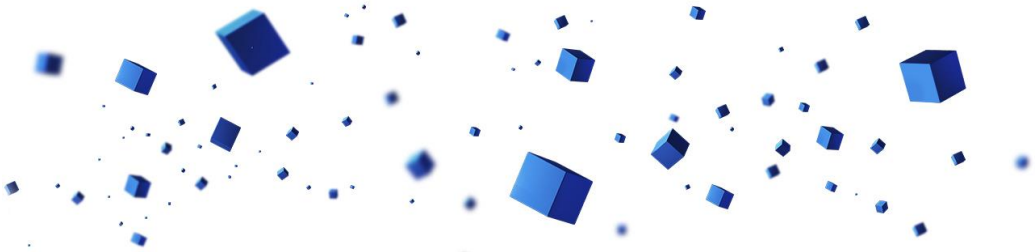
An appropriate testing program for the finished products shall be installed and maintained.

16 Company rating

The bluesign® rating of production sites evaluates and scores the performance level of a bluesign® SYSTEM PARTNER. The bluesign® rating shall support adequate priority setting and shall motivate to further minimize environmental impact, improve occupational health and safety (OH&S) and consumer safety, and increase resource productivity.
By means of a rating scheme, the performance level of a production site is scored by allocating it to one of four performance levels (foundational, developing, progressive, and aspirational).

The objectives of the bluesign® rating are to:

- Enable system partners to monitor their performance level
- Highlight performance potentials and determine areas for priority setting
- Guide weaker bluesign® SYSTEM PARTNERS to a higher performance level
- Support bluesign® SYSTEM PARTNERS in drawing up a continual improvement program and assist them in setting proactive goals
- Give recognition to progressive and aspirational bluesign® SYSTEM PARTNERS
- Enable progressive and aspirational bluesign® SYSTEM PARTNERS to show their success



Six main areas and several sub-areas relating to management systems, input stream management (manufacturer), Product Stewardship (chemical supplier), environmental impact, Occupational Health and Safety (OH&S), and resource aspects are considered to determine the performance of the bluesign® SYSTEM PARTNER.

The performance of the company according to the bluesign® RATING MATRIX shall be regularly evaluated. A bluesign® SYSTEM PARTNER shall strive to continually improve its rating.

For more details, see *bluesign® CRITERIA for production sites – ANNEX: Rating*.

17 Verification of compliance

17.1 Assessments

The requirements defined by these criteria will be reviewed by BLUESIGN during assessments, including on-site inspections at the production site.

Generally, following a Clean Factory Approach, the whole production site is in the scope of the assessment. In cases where only one legally independent corporation is responsible for an industrial park consisting of a conglomerate of several industry sectors, it is at the discretion of BLUESIGN to focus only on the relevant installations and associated activities.

The results of the assessment are summarized in an assessment report. This report includes, among others, a decision of BLUESIGN on the compliance of the production site with the relevant bluesign® CRITERIA. Nonconformities are documented and listed along with proposed corrective actions by BLUESIGN, and the performance of the production site is rated according to the *bluesign® CRITERIA for rating of production sites*. Furthermore, recommendations for improvements are given. The assessment report finally concludes whether or not a bluesign® SYSTEM PARTNERSHIP is recommended.

A company obviously or seriously violating the guiding principles (see Chapter 3) or aspects listed in the *ANNEX: Exclusion criteria* is excluded from bluesign® SYSTEM PARTNERSHIP.

Re-assessments have to be carried out no later than every three years and before the expiry of any valid certificates.

If a critical non-conformity is detected or if the relevant organizational and technical procedures change significantly, a follow-up inspection may be necessary.

BLUESIGN reserves the right to carry out an unannounced follow-up inspection at any time.

In cases where processes and/or chemicals are involved along the supply chain that are of significant concern with regard to impact on people and the environment, BLUESIGN reserves the right to assess (by means of an assessment and/or on-site inspection) not only the production site itself but also the upstream processes, or even to request a bluesign® SYSTEM PARTNERSHIP from a supplying company.

Industry-specific criteria regarding verification of compliance are provided in the ANNEX documents.

17.2 Active information duty

To ensure the function and integrity of the bluesign® SYSTEM, a bluesign® SYSTEM PARTNER has information duties to BLUESIGN and directly affected system partners. The following cases trigger immediate information duties to BLUESIGN:

- Any issues regarding possible non-compliance with relevant criteria
- Relevant changes to production processes (e.g. new permit-relevant machinery), production volumes (e.g. significant increase) or the product portfolio
- Significant accidents or incidents with occupational health or environmental relevance, or major non-compliance with site related local regulations

A duty to provide information to BLUESIGN and the customer is present in case of non-compliance of bluesign® APPROVED items, especially if legal requirements in the market of origin or target markets are infringed.

18 Validity

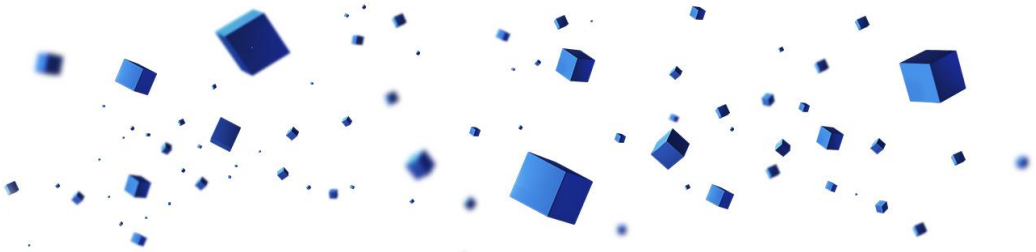
This document comes into effect from 2020-03. It replaces the *bluesign® CRITERIA for production sites* version 2.0.
For all companies that signed an agreement for an assessment or for a bluesign® SYSTEM PARTNERSHIP before 2020-03 the adapted and newly introduced requirements are binding after a transition period of one year from the date of release.
This document is subject to revisions. Details on the revision procedure for regular and unscheduled revisions are compiled in the *bluesign® SYSTEM* document.

19 Other applicable documents

The following documents complement the document at hand:

- *bluesign® SYSTEM*
- *bluesign® GLOSSARY*
- *bluesign® CRITERIA for chemical assessment (Homologation)*
- *bluesign® CRITERIA for production sites – ANNEX: Exclusion criteria*
- *bluesign® CRITERIA for production sites – ANNEX: CRITERIA for chemical supplier*
- *bluesign® CRITERIA for production sites – ANNEX: CRITERIA for fiber manufacturing*
- *bluesign® CRITERIA for production sites – ANNEX: CRITERIA for textile manufacturer*
- *bluesign® CRITERIA for production sites – ANNEX: CRITERIA for garment manufacturer / assembler*
- *bluesign® CRITERIA for production sites – ANNEX: Surface treatment of metals and plastics/non-textile substrates*
- *bluesign® CRITERIA for production sites – ANNEX: VOC management*
- *bluesign® CRITERIA for production sites – ANNEX: CRITERIA for down and feathers processing*
- *bluesign® CRITERIA for production sites – ANNEX: CRITERIA for leather processing*
- *bluesign® CRITERIA for production sites – ANNEX: Rating of production sites*
- *bluesign® SYSTEM BLACK LIMITS (BSBL) - Threshold limits for chemical substances in chemical products*
- *bluesign® SYSTEM SUBSTANCES LIST (BSSL) - Consumer safety limits*
- *bluesign® GUIDELINE – Product Stewardship for Chemical Suppliers*
- *bluesign® GUIDELINE - Chemicals Management and Chemical Change Management at manufacturers*
- *Relevant GUIDANCE SHEETS*

Current versions are available for download at www.bluesign.com/criteria.



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