# bluesign® CRITERIA for production sites

# Rating matrix - Chemical supplier

**Version 1.0 | 2020-03**

The rating matrix - Chemical supplier specifies all parameters which characterize the performance levels of a chemical supplier production site. The document at hand is to be seen in the context of *bluesign® CRITERIA for production sites – Annex: Rating of production sites*.

## Contents

# 1 Management System

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| **Legal Compliance Management** | | | |
| ■ Relevant legal documents (licenses, permits, regulations with subject to environment, OH&S and consumer safety) at hand<br>■ Site is free from prosecution by the regulators<br>■ Awareness of product stewardship regulations for the finished chemical products in the related markets | ■ Process for monitoring the validity of permits/licenses in place<br>■ Responsible persons are equipped with appropriate documents<br>■ Overview of valid regulations/licenses/permits and consequential actions is existent | ■ Company has a system of tracking changes in relevant regulations<br>■ Company has a system of tracking changes for product stewardship regulations for final products in the relevant markets | ■ Document management is part of certified management system |
| **Quality Management System** | | | |
| Responsible person(s) | | | |
| ■ Responsible person for Quality Management defined<br>■ Responsible persons have adequate skills and knowledge | ■ Tasks and responsibilities clearly defined and assigned (job description, organizational chart)<br>■ Directly accountable to the senior management; with adequate authorization (reflected in the organizational chart) | ■ Demonstrable experience with significant knowledge and skills (e.g. training documents, certificates at hand) | ■ Exemplary expert in specific field (e.g. member of external expert groups; more than 5 years' experience in industry branch; continuing education) |
| System | | | |
| ■ Quality policy established<br>■ SOPs for important processes at hand (purchasing, process control, chemicals management, quality tests, test equipment, etc.) | ■ Target setting/review of quality targets<br>■ Program with measures, schedule, responsibilities and budget given<br>■ Approach is visible in company (postings of statistics, employees are aware of SOPs) | ■ Management System (according to ISO 9001 or adequate) is established, implemented and maintained (system is not only a paper tiger)<br>■ Non-conformity reports given<br>■ Follow-up actions in case of non-conformities | ■ Third party certificate available and up-to-date<br>■ No major non-conformities<br>■ Certification is existent for more than 3 years |

| | | | |
|---|---|---|---|
| **Process Management** | | | |
| ■ Process management allows proper production (high quality of products, environmental and OH&S aspects under control) | ■ Relevant parameters, e.g. temperature, pressure prescribed in SOPs or by machine control<br>■ Routings and recipes clearly defined and followed | ■ Continuous improvement (e.g. changes in recipes and routings; trials to check optimization potentials)<br>■ Regular calibration for scales, measuring- and dosing units | ■ Demonstrable success to improve environmental/OH&S and quality performance by improvements regarding process management |
| **Traceability** | | | |
| ■ Product name and suppliers of chemical raw materials, intermediates and finished products traceable but not on lot basis | ■ On request main raw materials, intermediates and finished products are traceable on lot basis | ■ Traceability from finished products to raw materials, chemicals and intermediates given on lot basis | ■ Traceability from finished products to raw materials is excellent and supported by IT (e.g. bar code system, ERP); excellent data management |
| **Environmental Management System** | | | |
| **Responsible person(s)** | | | |
| ■ Responsible person for environmental management defined<br>■ Responsible persons have adequate skills and knowledge | ■ Tasks and responsibilities clearly defined and assigned (job description, organizational chart)<br>■ Directly accountable to senior management; with adequate authorization (reflected in the organizational chart) | ■ Demonstrable experience with significant knowledge and skills (e.g. training documents, certificates at hand) | ■ Exemplary expert in specific field (e.g. member of external expert groups; more than 5 years' experience in industry branch; continuing education) |
| **System** | | | |
| ■ Environmental policy established and appropriate<br>■ Actions to ensure appropriate/improve environmental performance | ■ Target setting/review of targets<br>■ Program with measures, schedule, responsibilities and budget given<br>■ Approach is visible in company (postings of statistics, employees are informed) | ■ Management System (according to ISO 14001 or adequate) is established, implemented and maintained (system is not only a paper tiger)<br>■ Non-conformity reports given<br>■ Follow-up actions in case of non-conformities | ■ Third party certificate available and up-to-date<br>■ No major non-conformities<br>■ Certification is existent for more than 3 years<br>■ Success of Management System is demonstrable |

| OH&S Management System | | | |
|---|---|---|---|
| Responsible person(s) | | | |
| ■ Responsible person for OH&S management defined<br>■ Responsible persons have adequate skills and knowledge | ■ Tasks and responsibilities clearly defined and assigned (job description, organizational chart)<br>■ Directly accountable to senior management; with adequate authorization (reflected in the organizational chart) | ■ Demonstrable experience with significant knowledge and skills (e.g. trainings, certificates at hand) | ■ Exemplary expert in specific field (e.g. member of external expert groups; more than 5 years' experience in industry branch; continuing education) |
| System | | | |
| ■ OH&S policy established and appropriate<br>■ Actions to ensure appropriate/improve OH&S performance | ■ Target setting/review of targets<br>■ Program with measures, schedule, responsibilities and budget given<br>■ Approach is visible in company (postings of statistics, employees are informed) | ■ Management System (according to OHSAS 18001 or adequate) is established, implemented and maintained (system is not only a paper tiger)<br>■ Non-conformity reports given<br>■ Follow-up actions in case of non-conformities | ■ Third party certificate available and up-to-date<br>■ No major non-conformities<br>■ Certification is existent for more than 3 years<br>■ Success of Management System is demonstrable |
| **Housekeeping and Maintenance** | | | |
| ■ Housekeeping allows appropriate function of processes<br>■ Responsibilities defined<br>■ Facility is cleaned up<br>■ Housekeeping avoids leaks and other unnecessary emissions | ■ Sufficient maintenance of facilities and equipment<br>■ Awareness of workers given<br>■ Housekeeping is part of training | ■ Housekeeping in general on a good level<br>■ Proactive activities (maintenance plans etc.) | ■ Machines and equipment in exemplary condition<br>■ Continuing efforts for improvement and enhancing of effectiveness and efficiency of the equipment |

# 2 Product Stewardship

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| **Input Stream Management** | | | |
| **Purchase specifications** | | | |
| ■ Purchase conditions for all materials contain minimum requirements to assure legal compliance of the chemical products manufactured | ■ Purchase conditions assure that bluesign® APPROVED chemical products manufactured from the relevant purchased raw materials comply with bluesign® TOOL restrictions | ■ Purchasing specifications are frequently revised (regarding critical substances) based on regularly updated knowledge of typical impurities, legal and BLUESIGN requirements | ■ Success of reducing critical substances by regular revision of purchasing specifications can be demonstrated |
| **Supplier evaluation** | | | |
| ■ Supplier list (supplier name, address, related raw materials) given | ■ Systematic supplier evaluation (incl. rating) is carried out<br>■ Supplier evaluation can have consequences for supplier selection (e.g. phase out of non-compliance suppliers) | ■ Supplier evaluation is part of management system and management review | ■ Most important suppliers are assessed regularly by company with respect to environmental and OH&S performance and raw material qualities |
| **Performance supply chain** | | | |
| ■ SDS for classified raw materials given<br>■ Only suppliers fulfilling product specifications with high degree of reliability selected | ■ Only suppliers able to meet the defined product specifications (incl. impurities) and able to provide sufficient information are selected<br>■ Most of the suppliers have a management system according to ISO 9001 installed<br>■ On request supplier informs on testing results, data from original manufacturer etc. | ■ Suppliers inform by meaningful Certificate of Analysis on most important impurities<br>■ Supplier informs in a proactive way<br>■ Most of the suppliers are ISO 9001 certified | ■ Supplier cooperates with company for continuous improvement<br>■ Most of the suppliers are ISO 9001 and ISO 14001 certified |

| | | | |
|---|---|---|---|
| **Monitoring/Testing of raw materials** | | | |
| ■ Occasional tests for substances (mostly in case of issues; input control is still focused mainly on general parameters as appearance, purity)<br>■ Supplier documentation is checked on lot basis | ■ Increased testing of hot spots<br>■ Supplier specifications are re-checked (e.g. by random testing) before material is accepted<br>■ Tests according to bluesign® CRITERIA/Product stewardship guideline performed<br>■ Data base existent | ■ Regular, systematical and proactive testing established companywide (all relevant impurities considered, first deliveries are checked more in detail, testing depends on supplier rating) | ■ Own lab holds 17025 certificate<br>■ Testing is part of management system (statistics; tests are systematically evaluated for continuous improvement) |
| **Hazard Communication** | | | |
| **SDS generation** | | | |
| ■ Responsibilities defined<br>■ Procedure assures legal compliance<br>■ Minimum and correct data set in SDS | ■ Procedure to write the SDS are described in a SOP or in an adequate document<br>■ Procedure for correct classification/labeling of substances and mixtures is defined<br>■ SDS are updated and disseminated to customers appropriately | ■ Software or correct template for correct SDS writing as well as classification and labeling of substances/ mixtures in place | ■ Exemplary SDS content and SDS management<br>■ Voluntarily more detailed content in SDS |
| **Knowledge of Product Stewardship team** | | | |
| ■ Basic qualification and knowledge given (employees have adequate education and GHS knowledge) | ■ Employees are GHS specialists and use relevant information sources (compare Product Stewardship Guideline); employees are familiar with bluesign® CRITERIA/ bluesign® TOOL<br>■ Awareness of regulatory changes given<br>■ Sufficient human resources given | ■ High level employees; experts know-how given (GHS basic trainings are NOT sufficient)<br>■ Product Stewardship team has a system of tracking changes in relevant regulations (e.g. ECHA consumer safety regulations) | ■ Employees are members of national/international associations (ETAD, TEGEWA, CEFIC, other groups) |
| **Information management** | | | |
| ■ Recipes for mixtures at production site | ■ Data from raw material/intermediate spec. and control and data from production control regarding impurities are available for the SDS authoring and Product Stewardship team | ■ Product Stewardship team requests proactively (internally and externally) data about possible impurities/by-products<br>■ Changes of specifications documented | ■ Systematic approach for information management<br>■ Product Stewardship team is very well connected to internal and external departments/experts |

| | | | |
|---|---|---|---|
| **Toll Manufacturing** | | | |
| ■ Written agreement with toll manufacturer given; agreement includes Product Stewardship aspects<br>■ Raw materials used by toll manufacturer are known to company (SDS, Certificates of Analysis)<br>■ On request toll manufacturer informs on testing results, data from original manufacturer etc. | ■ Raw materials are nominated by company<br>OR<br>Detailed specifications, excellent data on all raw materials used by toll manufacturer<br>■ Testing program for toll-manufactured products and raw materials in place | ■ Toll manufacturing company holds valid 9001 certificate | ■ Toll manufacturer(s) hold valid ISO 9001 certificate<br>■ Continuous improvement and follow-up at toll manufacturer(s) ensured |
| **Rebranding** | | | |
| ■ Supplier(s) of finished products for re-branding have basic GHS and chemical knowledge given<br>■ Traceability of finished products to their sources on a lot basis at supplier(s) possible<br>■ Procedures for correct transfer of SDS and TDS (generation, dissemination and update) as well as correct transfer of labelling in place | ■ Information flow between supplier(s) and chemical company regarding test results on SPECs and/or impurity data given<br>■ Special testing program with high frequency for critical impurity parameters in finished products from supplier(s) in place at company | ■ Chemicals and product stewardship experts available at the production site of the supplier(s)<br>■ Supplier(s) of finished products are selected according to their installed management system(s) | ■ Supplier(s) of re-branded chemical product(s) are certified according ISO 9001/14001 or OSHAS 18001<br>■ Supplier(s) of finished products for re-branding are subject to regular company assessments by the company<br>■ Written agreement(s) with supplier(s) of finished products are available and PS aspects are covered |
| **Finished Product** | | | |
| **Product development** | | | |
| ■ Legal compliance assured | ■ Company optimizes conventional products (e.g. substitution of a non-biodegradable dispersing agent by a biodegradable alternative) | ■ Eco friendly products in portfolio (e.g. products made of renewable sources, products which minimize impact in downstream processes, highly biodegradable products) | ■ Company target is to develop and sell ecofriendly products<br>■ Success communicated |

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| **Quality assurance** | | | |
| ■ Testing only if issued or only on demand | ■ Voluntary testing of finished products | ■ Systematic approach<br>■ Testing program established<br>■ Data base | ■ Quality related KPIs defined (e.g. rate of customer complaints, failure rate etc.) and improvements have been achieved |
| **Customer support** | | | |
| ■ Appropriate technical support (SDS + TDS) | ■ Well-documented technical support (e.g. brochures, recommendations on application<br>■ customer visits on request) | ■ Profound technical assistance provided (lab trials in own lab) | ■ Application engineers give proactive support at manufacturing sites |

# 3 Resources

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| **Management Resources** | | | |
| ■ Single resource saving management measures are applied | ■ Target setting/review<br>■ Program with measures, schedule, responsibilities and budget given | ■ Reuse and recycling efforts<br>■ Own systematic proactive efforts for resource saving (e.g. overall plan for energy and water saving)<br>OR<br>External audits (energy audit, etc.) | ■ Resource management is part of the company strategy<br>■ Success on resource saving can be demonstrated and is communicated (homepage, conferences, environmental report, etc.) |
| **Monitoring Resource Consumption** | | | |
| ■ Most important resource figures known for company level | ■ All relevant resource figures (water, energy, chemicals, other raw materials) are continuously recorded and evaluated (at least at company level)<br>■ Basic KPI´s established (e.g. total water consumption, total energy consumption) | ■ Comprehensive monitoring (e.g. monitoring exceeds company level (department level, machine level), well documented results; statistics; on-line measurements; detailed and systematic tracking of resource consumptions)<br>■ More detailed KPI´s established<br>■ Internal/external benchmarking | ■ Monitoring is part of the continuous improvement program of the company<br>■ Production data acquisition includes resource data<br>■ Yearly management review |
| **Equipment and Processes** | | | |
| ■ Several resource saving measures (e.g. prevention of leaks, thermal insulation, switching of lights, etc.) | ■ Important resource saving techniques installed (e.g. heat exchanger, closed loop for cooling water) | ■ Systematic investment in resource saving equipment/modifying processes<br>■ Consequent efforts for reuse and recycling | ■ BAT equipment installed |
| **Renewable Energy** | | | |
| ■ ≥ 5 % | ■ ≥ 25 % | ■ ≥ 50 % | ■ ≥ 75 % |

# 4 Environment

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| **Wastewater Emissions** | | | |
| **Management (direct and indirect discharge)** | | | |
| ■ Valid permits for discharge available | ■ Single actions to reduce impact (load/volume/toxicity) (e.g. one or more water saving machine(s) installed; low emission processes) | ■ Systematic efforts to reduce impact (load/volume/toxicity)<br>■ Reduction plans; target setting; key figures; installation of new machines/processes considers wastewater impact<br>■ Treatment of partial streams (if relevant) | ■ Wastewater management is part of the company strategy<br>■ Success on lowering impact can be demonstrated and is communicated to relevant stakeholders (homepage, conferences, environmental report) |
| **Monitoring (in case of indirect discharge without on-site pre-treatment: only monitoring of unpurified wastewater to be considered)** | | | |
| ■ Monitoring follows legal instructions | ■ Monitoring exceeds legal instructions (e.g. additional parameters; additional measuring points. Voluntary self-monitoring, shorter measuring intervals; occasional tracking of sources, volumes, loads)<br>■ Monitoring allows proper operation of WWTP<br>■ Basic emission register (summary on important emission ports and connected machines) | ■ Detailed emission register (all emission ports with typical emission data are listed)<br>■ Also part streams monitored<br>■ Well documented test results; statistics; key figures; on-line measurements | ■ Monitoring is part of the company's continuous improvement program (e.g. yearly management review)<br>■ Company can demonstrate that monitoring is used to increase WWTP efficiency and to lower impact |

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| **WWTP (on-site treatment; direct discharge and on-site pre-treatment for indirect discharge)** | | | |
| ■ In place and proper operation<br>■ Appropriate sludge disposal<br>■ General understanding of wastewater emission loads and also treatment steps with good documentation (e.g. flow chart) available | ■ WWTP in good condition; effectiveness monitored and recorded (e.g. good maintenance recognizable; inspections to ensure effectiveness; measurement devices well-kept; WWTP lab with good housekeeping)<br>■ Incidents recorded<br>■ Procedures/equipment in place for direct response in case of incidents/irregularities (e.g. scenario for heavy rainfall)<br>■ Educated staff<br>■ In case of indirect discharge: good cooperation with external WWTP | ■ Wastewater treatment system optimized (e.g. SOPs for operation well-documented; sophisticated WWTP lab; high efficiency for the most important loads; engineers with deep knowledge on WWTP, automatically controlled)<br>■ Resource aspects considered (energy saving, saving of chemicals) | ■ WWTP sets standard for the industry; BAT implemented for wastewater purification; forward looking technique, tailor-made process steps |
| **Discharge parameters (direct discharge)** | | | |
| ■ Legal industry specific limits kept (occasional deviations which are followed by efficient actions can be accepted) | ■ BLUESIGN limits kept (Occasional deviations which are followed by efficient actions can be accepted) | ■ Discharge figures publicly available (at least the most important figures; homepage, environmental report, internet platform (NGO, governmental)) | ■ Voluntarily lower and/or additional limit values defined |
| **Discharge parameters (indirect discharge)** | | | |
| ■ Third party WWTP in place (address given)<br>■ Limits for discharge to third party WWTP kept | ■ Principle and discharge limits from third party WWTP known<br>■ Good contacts to third party WWTP<br>■ BLUESIGN limits kept at third party WWTP (Occasional deviations which are followed by efficient actions can be accepted) | ■ Discharge figures from third party WWTP publicly available | ■ Voluntarily lower and/or additional limit values for discharge to third party WWTP defined |

| Air Emission | | | |
|---|---|---|---|
| **Foundational** | **Developing** | **Progressive** | **Aspirational** |
| **Air emission supply units** | | | |
| **Solid fuel** | | | |
| *Emissions Dust [mg/Nm³]* | | | |
| ≤ 80 | ≤ 60 | ≤ 40 | ≤ 20 |
| *Emissions NOx [mg/Nm³]* | | | |
| ≤ 600 | ≤ 450 | ≤ 300 | ≤ 150 |
| *Emissions $SO_2$ [mg/Nm³]* | | | |
| ≤ 1400 | ≤ 1050 | ≤ 700 | ≤ 350 |
| **Liquid fuel** | | | |
| *Emissions Dust [mg/Nm³]* | | | |
| ≤ 125 | ≤ 100 | ≤ 75 | ≤ 50 |
| *Emissions NOx [mg/Nm³]* | | | |
| ≤ 450 | ≤ 360 | ≤ 270 | ≤ 180 |
| *Emissions $SO_2$ [mg/Nm³]* | | | |
| ≤ 400 | ≤ 200 | ≤ 100 | ≤ 50 |
| **Gaseous fuel** | | | |
| *Emissions Dust [mg/Nm³]* | | | |
| --- | --- | --- | --- |
| *Emissions NOx [mg/Nm³]* | | | |
| ≤ 250 | ≤ 200 | ≤ 150 | ≤ 100 |
| *Emissions $SO_2$ [mg/Nm³]* | | | |
| ≤ 40 | ≤ 20 | ≤ 10 | ≤ 5 |
| Oxygen reference: solid fuel: 7 %; liquid and gaseous fuel: 3 %. One averaged scoring point per fuel. If more than one type of fuel is used, a weighted total average is calculated.<br>Valid for power generations with a nominal capacity of more than 1 MW | | | |

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| **Process emissions** | | | |
| Management | | | |
| ■ Valid permits available (general and/or machine specific permits (depends on local legislation))<br>■ Awareness given | ■ Single actions to reduce impact (volume, odor, particles, VOC, toxic substances) given (e.g. low-emission processes installed; filters installed; change to low emission chemicals; actions to reduce VOC) | ■ Systematic efforts to reduce impact (volume, odor, particles, VOC, toxic substances)<br>■ Reduction plans, target setting<br>■ Installation of new machines considers air emission impact | ■ Off-gas management is part of the company strategy<br>■ Success on lowering impact can be demonstrated and is communicated to relevant stakeholders (homepage, conferences, environmental report) |
| Monitoring | | | |
| ■ Monitoring follows legal instructions | ■ Monitoring exceeds legal instructions (e.g. additional parameters; additional measuring points. Voluntary self-monitoring, shorter measuring intervals)<br>■ VOC mass balance (if VOC relevant)<br>■ Basic emission register (summary on important emission ports and connected machines) | ■ Comprehensive monitoring (well documented data; mass balance; statistics; key figures; on-line measurements)<br>■ Detailed emission register (all emission ports with typical emission data are listed) | ■ Monitoring is part of the company's continuous improvement program<br>■ Yearly management review; company can demonstrate that monitoring is used to increase off-gas abatement efficiency and to lower impact |
| Off-gas treatment system | | | |
| ■ In place<br>■ Proper operation | ■ Cleaning system in good condition (e.g. good maintenance; inspections to ensure effectiveness, measurement devices well-maintained)<br>■ Educated staff | ■ Cleaning system optimized (e.g. SOPs for operation well-documented; high efficiency for the most important loads; engineers with deep knowledge; automatically controlled; procedures in place for direct response in case of incidents/irregularities) | ■ Cleaning system sets standard for the industry (BAT; forward looking technique, tailor-made equipment)<br>■ RTO for VOC relevant companies with significant emission |

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| Off-gas parameters | | | |
| ■ Legal industry specific limits kept (occasional deviations which are followed by efficient actions can be accepted) | ■ BLUESIGN limits kept (occasional deviations which are followed by efficient actions can be accepted) | ■ Discharge figures publicly available (at least the most important figures; homepage, environmental report, internet platform (NGO, governmental)) | ■ Voluntary lower and/or additional limit values defined |
| **Ozone depleting substances** | | | |
| ■ Company has evaluated equipment for-potential to contain ozone-depleting substances (ODS) (chillers, air conditioning units, etc.)<br>■ Relevant permits are available and up to date<br>■ Legal compliance | ■ SOP for maintenance of ODS containing equipment in place<br>■ Equipment containing ODS is checked regularly to ensure that it is in appropriate working order | ■ Targets for substitution of ODS set | ■ Demonstrable achievements related to reducing ODS |
| **Environmental Noise** | | | |
| ■ No obvious violation of legal requirements<br>■ No qualified neighborhood complaints in the last 3 years<br>OR<br>Neighborhood complaints are followed by appropriate actions | ■ Single measures to prevent high noise levels<br>■ Occasional sound insulations | ■ Systematic efforts and proactive approach to reduce environmental noise (e.g. reduction plans; target setting; noise register) | ■ Noise management is part of the company strategy<br>■ Success on lowering noise level can be demonstrated |
| **Waste Management** | | | |
| ■ Valid permits available<br>■ Contracts/certificates for disposal companies at hand<br>■ Disposal companies are qualified/accredited<br>■ Separation of hazardous waste from non-hazardous waste | ■ Separation of all relevant waste types<br>■ Waste balance for relevant waste types<br>■ Single actions to reduce waste (e.g. paper, textile, etc. hazardous waste separation, returnable containers, textile waste is reused or recycled by third party) | ■ Systematic efforts to reduce waste (including hazardous waste)<br>■ Detailed waste balance<br>■ Reduction plan, target setting, pro-active approach<br>■ Workers well trained on waste separation | ■ Waste management is part of the company strategy<br>■ Environmental policy includes waste reduction aspects<br>■ Success on lowering impact can be demonstrated and is communicated to relevant stakeholders (homepage, conferences, environmental report) |

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| **Emissions Soil and Groundwater** | | | |
| **Precautionary measures** | | | |
| ■ Contamination of soil and ground water is prevented in critical areas through appropriate measures<br>■ Pipes, tanks, floors and storage places maintained | ■ Maintenance schedules available<br>■ Third party certificates for tank inspections<br>■ Protocols for check of floorings, pipes (including underground pipes) | ■ Systematic approach<br>■ Proactive measures (storm water plan, firefighting water retention etc.)<br>■ No issues in the last 3 years | ■ Systematic approach for prevention of soil and ground water contamination is part of management system<br>■ Exemplary, forward-looking approach<br>■ Periodical review of measures by management |
| **Historical brownfields** | | | |
| ■ No qualified legal issue | ■ Brownfield area is existent and known to authorities; actions prescribed by authorities are ongoing<br>OR<br>History of the site is known; brown fields most likely not given | ■ Brownfield area is existent and known to authorities; actions prescribed by authorities are completed<br>OR<br>Brown field status checked with spot checks and if necessary remediation started | ■ Where there are no apparent brownfields, detailed voluntary status reports available as confirmation that there are no contaminations<br>■ In case of brownfields known to authorities: remediation exceeds the measures defined by authorities<br>■ In case of remediation on voluntary basis: remediation finished and also checked by external expert<br>■ Communication to relevant stakeholders |

# 5 Occupational Health & Safety and Emergency Preparedness

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| **OH&S Management** | | | |
| ■ Meeting legal requirements<br>■ No severe incident without an effective and documented follow-up action in the last 3 years<br>■ Responsibility defined | ■ Risk assessments for most important working places given<br>■ Safety instructions existent; safety signs existent<br>■ Necessary protective equipment in good order and used<br>■ Records on work accidents and corrective actions at hand | ■ Comprehensive risk assessments with follow-up<br>■ Employees involved in risk assessments<br>■ Zero incident target<br>■ Management is informed annually on issues and improvement (management review)<br>■ Significant investment in OH&S equipment<br>■ Pro-active approach (STOP principle: Substitution, Technical measures, Organizational measures, PPE) | ■ Certified OH&S management system installed<br>■ No incident subject to reporting in the last 3 years |

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| **OH&S Training** | | | |
| ■ Workers have basic knowledge (occasional trainings)<br>■ New workers receive initial training | ■ Regular yearly trainings (training on hazardous materials included)<br>■ Training and information requirements for specific tasks are clearly defined<br>■ Subcontracted workers trained<br>■ On-the-job instruction<br>■ Refreshment trainings<br>■ Training records available<br>■ Workers have profound knowledge | ■ Comprehensive training program installed<br>■ Workers have advanced knowledge<br>■ Training by experts (internal or external); internal trainers are well-educated | ■ Periodical review of training program to ensure that it is up to date and effective; corrective actions<br>■ Training program and training success subject to regular management review |
| **Workplace Atmosphere** | | | |
| ■ Legal compliance<br>■ Measurements at hand (if relevant) | ■ BLUESIGN limits for workplace atmosphere are kept | ■ Systematic monitoring program installed<br>■ Single/local preventive measures | ■ Precautionary principle as strategy |
| **Workplace Noise** | | | |
| ■ No obvious violation of legal requirements<br>■ Personal hearing protection is provided in relevant areas | ■ Complete noise register; consistent marking of relevant noise areas<br>■ Hearing protection is used properly | ■ Single/local measures for noise reduction | ■ Systematic approach for active noise protection and reduction (e.g. noise protection considered in purchasing conditions and equipment investments) |

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| **Emergency Preparedness** | | | |
| ■ Meeting legal requirements<br>■ Responsibilities defined<br>■ Several actions (e.g. emergency exits marked, fire extinguisher/hydrants in place, trainings performed, assembly point(s) marked) | ■ Systematic approach based on risk assessments<br>■ Responsible persons named, well-educated and sufficient (e.g. first aiders, fire fighters)<br>■ Emergency preparedness plan (alarm list with phone numbers, of internal and external responsibilities)<br>■ Regular and documented trainings (fire, evacuation)<br>■ Consistent and sufficient pictograms<br>■ Emergency devices appropriate, sufficient and maintained (e.g. company has knowledge on type of suitable fire extinguisher)<br>■ Preparedness for severe accidents (for companies where major accidents can happen due to kind and quantity of hazardous materials stored and processed) | ■ Employees involved in planning emergency preparedness and response<br>■ Zero incident target<br>■ Records on incidents and corrective actions at hand<br>■ Management is informed annually on issues and improvement (management review)<br>■ High standard of emergency preparedness assured by adopting a comprehensive approach (that includes external experts and authorities) | ■ Emergency preparedness is part of certified OH&S management system and visible in the company |
| **Safety Management** | | | |
| **Management of handling and storage of hazardous materials** | | | |
| ■ Meeting legal requirements<br>■ Actual SDS for all hazardous materials available<br>■ No severe incident without an effective and documented follow-up action in the last 3 years | ■ Risk assessments performed<br>■ Hazardous chemicals inventory list established<br>■ Storage/handling advices in SDS followed<br>■ Toxic and highly toxic chemicals stored in locked areas | ■ Comprehensive storage concept established (including hazardous waste) | ■ Handling and storage of hazardous materials is part of management system and continuous improvement<br>■ Systematic proactive measures<br>■ Periodical review to ensure that storage concept is up to date and effective; corrective actions<br>■ No incident subject to reporting in the last 3 years |

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| **Operations/Equipment** | | | |
| ■ No obvious risk from operation | ■ Equipment maintained<br>■ Control instruments in good order<br>■ Appropriate retention measures<br>■ Proper maintenance and marking of storage areas<br>■ Pipes clearly marked<br>■ All containers with hazardous chemicals are correctly labeled<br>■ Regular control of relevant equipment by experts | ■ Equipment in very good condition<br>■ Partly automated filling/dosing or other proactive measures to reduce operational risk | ■ Systematic proactive measures to reduce operational risk |

## 6 Share of Manufactured bluesign® APPROVED Chemical Products

| Foundational | Developing | Progressive | Aspirational |
|---|---|---|---|
| **Share of manufactured bluesign® APPROVED chemical products (items)** | | | |
| ■ ≥5 % | ■ ≥ 25 % | ■ ≥ 50 % | ■ ≥ 75 % |
| **Share of manufactured bluesign® APPROVED chemical products (volume)** | | | |
| ■ ≥ 5 % | ■ ≥ 25 % | ■ ≥ 50 % | ■ ≥ 75% |
| The relevant product range shall be regarded (e.g. dyes, textile auxiliaries). | | | |

# 7 Validity

This document comes into effect from 2020-03.
This document is subject to revisions. Details on the revision procedure for regular and unscheduled revisions are compiled in the *bluesign® SYSTEM* document.