

bluesign® criteria for production sites

Annex: Chemical Supplier

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1 Scope

Comprehensive requirements for companies with production sites are determined in the *bluesign® criteria for production sites*. This document defines additional provisions for chemical suppliers.

2 Definitions

2.1 Chemical supplier

For the purpose of this document a chemical supplier is any company that places under own trade name chemical products such as auxiliaries, dyestuffs and other chemical products for production of textiles, leather and accessories on the market. A chemical supplier may be a manufacturer, a formulator or a rebrander of chemical products. A producer of chemical products who directly uses the produced chemicals for down-stream processing of articles will also fall under the category chemical supplier.

2.1.1 Rebrander

A company that purchases chemical products from a chemical supplier and distributes them under own brand name.

2.2 Toll manufacturer

A company producing chemical products on behalf of a chemical supplier. Specifications regarding purchase of raw materials and/or formulation recipes are made by the chemical supplier.

3 Product stewardship

Chemical companies have full responsibility for the products they manufacture, purchase, store and market to their customers. Correct and sufficient classification and labeling of chemical products as well as compliance with the relevant bluesign® criteria, can only be assured if the chemical company is serious about the principles of the product stewardship. The product stewardship team has to work interdisciplinary in an internal and external network of stakeholders. A guideline provided by bluesign technologies gives further instructions for bluesign® system partners how to install, implement and maintain an appropriate product stewardship.

3.1 Input stream management

Only an intelligent input stream management that considers the up-stream components such as impurities and by-products in purchased raw materials can help manage the complexity of the supply chain.

An appropriate input stream management concerning chemical raw materials and intermediates shall assure that sufficient knowledge on raw materials (active components) and adequate information on by-products with relevance to humans and environment is given. Effective quality control of the raw materials by means of the chemical analyses shall be established as a routine procedure.

The information provided by the suppliers of raw materials shall assure that the bluesign® criteria concerning restricted and banned substances can be met.

3.2 Laboratory

Appropriate own lab capacities shall be installed. Lab management shall follow the ISO 17025 principle. If testing is sub-contracted ISO 17025 certified laboratories shall be assigned.

4 Best available techniques

A chemical supplier shall be aware of Best Available Techniques that are relevant for the industry (see for example: <http://eippcb.jrc.ec.europa.eu/reference/>; e.g. production of speciality inorganic chemicals, production of polymers, manufacture of organic fine chemicals etc.).

5 Industry specific requirements

5.1 General

The following general requirements shall be considered:

- Use low contaminated raw materials
- Use water saving technologies
- Re-use water and install closed water circuits
- Use indirect cooling instead of injection cooling
- Prefer wastewater-free processes for off-gas cleaning and vacuum generation
- Retain mother liquors and recycle mother liquors in an optimised way
- Avoid air emission of harmful substances wherever possible; install efficient off-gas cleaning device(s) if relevant

The twelve principles of Green Chemistry according to U.S. EPA (United States Environmental Protection Agency) shall be the basis for the design of chemical products and processes. They can be used to incorporate inherently less hazardous chemicals into the manufacturing process, to increase energy efficiency and to avoid waste.

5.2 Water emissions

The following limit values have to be kept:

Parameter	Method	Unit	Limit Value
COD	DIN 38409-41		Efficiency of wastewater treatment: > 90 %
Nitrogen Total.	DIN EN 12260	mg/l	50
Phosphor Total	DIN EN 1189	mg/l	2
Fish egg toxicity	DIN EN ISO 15088	LID	2
Mercury	DIN EN 1483	mg/l	0.05
Cadmium	DIN EN ISO 11885	mg/l	0.2
Copper	DIN EN ISO 11885	mg/l	0.5
Nickel	DIN EN ISO 11885	mg/l	0.5
Lead	DIN EN ISO 11885	mg/l	0.5
Chromium Total	DIN EN ISO 11885	mg/l	0.5
Chromium (VI)	DIN 38405-24	mg/l	0.1
Zink	DIN EN ISO 11885	mg/l	2
Tin	DIN EN ISO 11885	mg/l	2

Table 1: Limit values for the direct discharge to the aquatic body. The measuring point is after wastewater treatment, before discharge to aquatic body. Sampling instructions: 5 grab samples measured on-site during 2 hours (minimum interval between the samplings is 2 min.) or one mixed volume proportional sample.

National or local requirements that are stronger or more detailed than the bluesign® criteria will supersede the limit values specified above.

The measurements shall be performed in regular intervals according to the above mentioned (see Table 1) or similar standard methods. Sampling interval depends on the dimensions and complexity of the plant as well as on the findings. Third party measurements must be at hand.

6 Verification of compliance

bluesign technologies verifies the compliance with the criteria at hand by means of an audit. Re-audits have to be carried out no later than every three years.

6.1 Company with multiple production sites

The goal is to physically audit all production sites of the system partner. It is at the discretion of bluesign technologies to define a specific audit approach and site selection considering relevancy regarding impact on people and environment.

The department(s) responsible for product stewardship for the chemical products intended for certification will be audited physically in any case. A system partner has to assure by means of an appropriate corporate policy that all site(s) follow the guiding principles for production sites (compare *bluesign® criteria for production sites*, Chapter 3) and that delivered products comply with the relevant bluesign® criteria by maintaining a suitable product stewardship program and company policies.

6.2 Toll manufacturing

A system partner has to assure by means of an appropriate corporate policy and product stewardship that toll manufacturing site(s) follow the guiding principles for production sites (compare *bluesign® criteria for production sites*, Chapter 3) and that delivered products comply with the relevant bluesign® criteria by maintaining a suitable product stewardship program and company policies.

It stays at the discretion of bluesign technologies to inspect the site(s) or even to request a system partnership of the toll manufacturing companies especially if processes and/or chemicals used at the toll manufacturing site(s) are of high risk regarding impact on people and environment.

7 Validity

This document comes into effect from April 01, 2014. It replaces the *bluesign® criteria for chemical suppliers, edition 1.4* from March 2010.

For all companies that signed the audit agreement before April 01, 2014 and for all system partners the implementation of the revised sections shall take place until April 01, 2015 at the latest.

This document is subject to changes. Changes will come into effect after prior notice and defined transition time.

8 Other applicable documents

- bluesign® system (effective version)
- bluesign® criteria for production sites (effective version)
- bluesign® system substances list (effective version)
- Product Stewardship Guideline for manufacturers and formulators (effective version)