

Customer Information / 10.01.2023

OEKO-TEX[®] STeP: New regulations in 2023

At the start of the year, the OEKO-TEX[®] Association as usual updates the applicable test criteria, limit values and requirements for its range of certifications and labels. The following new regulations for OEKO-TEX[®] STeP come into effect on April 1, 2023 after a three-month transition period:

Lifecycle assessment solution – The Impact Calculator

To achieve the industry's 2030 goal, companies need reliable data. To promote progress and data exchange along the global supply chain, OEKO-TEX[®] has launched the Impact Calculator. The tool measures the carbon and water footprint of each process step, the overall process and one kilogram of material/product.

Now, the Impact Calculator version 02.2022 with the updated emission factors is available.

The following updates of the Impact Calculator have been integrated:

- In "Energy & Water", the following input areas are now updated:
 - Electricity: Divided into direct and indirect
 - Fuel: Previously called Steam, divided into direct and indirect
- Results are divided into different Scopes
- Final report includes new statement "based on self-declared data & input values" in case data is not verified by an institute

<u>A digital chemical solution tailored to the OEKO-TEX® STeP requirements – The BHive®</u>

Due to increasing customer awareness and stricter legal regulations, there is a growing demand for more transparency regarding the use of chemical products in the production of textile and garments. Which is why OEKO-TEX® has formed an important partnership with sustainability accelerator GoBlu International. GoBlu International has developed an easy-to-use app that will revolutionize chemical management in global supply chains. GoBlu's innovative BHive® app allows manufacturing companies to use their smartphones to collect information about their chemical products used on site and determine in seconds which products meet the sustainability requirements of many brands/retailers.



Special features tailed to the STeP requirements have been developed by GoBlu and will be integrated into the BHive[®]. The BHive[®] can be used by all STeP customers using chemicals as of April 2023. With this integration, our STeP customers benefit from a large chemical database and, in the long term, reductions in workload, time and costs can be guaranteed. This ensures improved compliance with recognized industry standards such as our STeP MRSL and ZDHC MRSL using intelligent systems.

STeP Standard 01.2023

Due to increased sustainability requirements in the market, we see the need to reinforce our sustainability criteria in below modules. The following new regulations for OEKO-TEX[®] STeP come into effect on April 1, 2023 after a three-month transition period:

New Exclusion Criteria in STeP Standard in Annex 11

Chemical Management

4.1.3 Chemical inventory

The facility shall know the following aspects of the chemicals used, which should preferably be maintained in an inventory list or ERP.

4.6.2.5 Working with chemicals

In case of using volatile organic compounds (VOC, def. see chapter 11.1) in the production processes, measures must be taken to limit the exposure of workers to VOC in the workplaces.

Environmental Performance

4.2.5 Carbon Footprint / GHG emissions / CO₂- Emissions

This shall be part of the company's policy as well as the common global goal to reduce GHG emissions (such as CO2, Methane, Nitrous Oxide, Ozone) by 30 % by 2030 (2010 is the baseline) and reach carbon neutrality and/or net zero emissions at around 2050.

Therefore, a system for calculating the carbon footprint (CO2eq) of the facility shall be documented and targets shall be defined.

A project for minimizing carbon footprint (CO2eq) as well as all global warming potential chemicals as mentioned in Chapter 4.2.6, shall be planned and documented.



Environmental Management System

4.3.10.1 Performing an environmental assessment

A environmental assessment of all direct and indirect environmental impacts of activities, products and performances shall be carried out and shall be documented. Once a year or in case of major changes in the production in terms of environmental impact.

Social Responsibility

4.4.3 Social Responsibility Management System

This responsible person shall hold regular training sessions for all employees on the social responsibility aspects (e.g. Code of Conduct) and keep training records.

4.4.8 Employment relationship

The facility shall have written recruitment and termination policy and a written policy on development program and financial benefits.

Quality Management

4.5.5.2 Purchasing (suppliers and contractors)

Any purchasing, outsourcing or subcontracting of goods, materials or services related to services or products shall be controlled. It shall be ensured that all purchased goods/services meet all specified requirements. Suppliers and supply chains shall be assessed and monitored.

A description of planned purchases shall be compiled to ensure that all requirements in this regard are met. Suppliers, sub-suppliers, contractors and subcontractors shall be involved in the process of improving social working conditions, safety and environmental matters and the measures in this regard.

Suppliers, sub-suppliers, contractors and subcontractors shall establish and maintain appropriate procedures for selecting sub-contractors based on their ability to meet the STeP requirements, maintain appropriate documentation for meeting the STeP requirements.

Suppliers, sub-suppliers, contractors and subcontractors shall provide training options for outworkers in relation to personal protection, workers' rights and access to employee information in the facility.

As a minimum requirement, the supplier, sub-supplier and/or contractor, sub-contractor shall sign the OEKO-TEX® STeP Code of Conduct for supplier, which can be found in Annex I (STeP Standard).



4.5.5.3 Operations management

Services/products shall be identifiable at all times and tracked (traceability) throughout all stages of production.

4.5.9.3 Sourcing of raw materials

The origin of the processing hide and skins is expected to be known and the source shall be in accordance to CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) and other legal requirements.

A wood sourcing policy which considers at least 25% of pulp fibers or pulp that comes from such sources, including the amount of recycled materials (e.g. cotton scraps), shall be defined.

Health and Safety

4.6.2.5 Working with chemicals

All persons working with chemicals shall be trained related to the chemical management system and relevant topics (such as legal aspects, use of chemicals, storage, environmental and safe handling etc.).

4.6.3 Facility safety

The facility shall classify areas where hazardous explosive atmospheres may occur into zones.

Instructions in case of fire, emergency numbers and GHS pictograms shall be published at the storage area of gases in vessels.

New Substance Additions to the OEKO-TEX® STeP Chemical List in Annex 3

MRSL Group 4: Arylamines (released from Azo colorants or in free manner)

Substance	CAS Number	Limit value
2,5-Diaminotoluene / 2-methyl-p-phenylendiamine	615-50-9	no limits for wastewater
4-Ethoxyaniline / p-phenetidine	156-43-4	no limits for wastewater
3,3-Diaminobenzidin	91-95-2	no limits for wastewater

MRSL Group 4: Hazardous colorants (Carcinogenic, allergenic, or banned for other reasons)

Substance	CAS Number	Limit value
C.I. Basic Violet 3	548-62-9	no testing required for wastewater
C.I. Basic Yellow 2/ Solvent Yellow 34	2465-27-2	no limits for wastewater



MRSL Group 5: Organotin compounds

Substance	CAS Number	Limit value
Dipropyltin	867-36-7	testing required for wastewater (like other OTC)

PFAS changes:

Updates from: COMMISSION REGULATION (EU) 2021/1297 of 4. August 2021 amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council as regards perfluorocarboxylic acids containing 9 to 14 carbon atoms in the chain (C9-C14 PFCAs), their salts and C9-C14 PFCA-related substances.

MRSL Group 6: PFC's, Per- and polyfluorinated compounds Per- and Polyfluorinated Alkyl Substances (PFAS)

Substance	CASNumber
PFAS (according to OECD)	various CAS

MRSL Group 8: Other VOC`s

Substance	CAS Number
N-ethyl-2-pyrrolidone	2687-91-4

MRSL Group 14: Other substances

Substance	CAS Number	Limit value
2-Mercaptobenzothiazole (2-MBT)	149-30-4	no limits for wastewater
Tris(2-methoxyethoxy)vinylsilane	1067-53-4	no limits for wastewater
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol ³	119-47-1	no limits for wastewater
N-(hydroxymethyl)acrylamide	924-42-5	no limits for wastewater

MRSL Group 14: Other substances

Substance or substance group	CAS Number
Glutaraldehyde	111-30-8

An additional footnote is added in the Standard version 01.2023. *footnote: it is accepted as an in-can preservation



STeP Wastewater Testing

For the below parameters "testing required" has been added in Annex 3

Substance or substance group	CAS Number
Nonylphenol ethoxylates (NPEO)	9016-45-9
Nonylphenol ethoxylates (NPEO)	26027-38-3
Nonylphenol ethoxylates (NPEO)	37205-87-1
Nonylphenol ethoxylates (NPEO)	68412-54-4
Nonylphenol ethoxylates (NPEO)	127087-87-0
Nonylphenol (NP), mixed isomers	104-40-5
Nonylphenol (NP), mixed isomers	11066-49-2
Nonylphenol (NP), mixed isomers	25154-52-3
Nonylphenol (NP), mixed isomers	84852-15-3
Octylphenol ethoxyl- ates (OPEO)	9002-93-1
Octylphenol ethoxyl- ates (OPEO)	9036-19-5
Octylphenol ethoxyl- ates (OPEO)	68987-90-6
Octylphenol (OP), mixed isomers	140-66-9
Octylphenol (OP), mixed isomers	1806-26-4
Octylphenol (OP), mixed isomers	27193-28-8
Acenaphthene	83-32-9
Acenaphthylene	208-96-8
Anthracene	120-12-7
Benzo[a]anthracene	56-55-3
Benzo[a]pyrene (BaP)	50-32-8
Benzo[b]fluoranthene	205-99-2
Benzo[e]pyrene	192-97-2
Benzo[ghi]perylene	191-24-2
Benzo[j]fluoranthene	205-82-3
Benzo[k]fluoranthene	207-08-9
Chrysene	218-01-9
Dibenz[a,h]anthracene	53-70-3
Fluoranthene	206-44-0
Fluorene	86-73-7
Indeno[1,2,3-cd]pyrene	193-39-5
Naphthalene	91-20-3
Phenanthrene	85-01-8
Pyrene	129-00-0



1,2-Dichlorobenzene	95-50-1
Medium-chain Chlorinated paraffins (MCCPs) (C14-C17)	85535-85-9
Dimethyl formamide; N,N-dimethylformamide (DMFa)	68-12-2
Basic violet 3 with >0.1% of Michler´s Keton	548-62-9
C.I. Acid Violet 49	1694-09-3
Tetrabutyltin compounds (TeBT)	Multiple
Tripropyltin Compounds (TPT)	Multiple
Tricyclohexyltin (TCyHT)	Multiple
Tetraethyltin Compounds (TeET)	Multiple
1,2-benzenedicarboxylic acid, di-C6-8 branched and liearalkyl esters , C7-rich (DIHP)	71888-89-6
1,2-benzenedicarboxylic acid, di-C6-8 branched and liearalkyl esters , C7-rich (DIHP)	84777-06-0
1,2-benzenedicarboxylic acid, di-C7-11 branched and liearalkyl esters (DHNUP)	68515-42-4
Di-n-pentylphthalates	131-18-0
Diisopentylphthalates	605-50-5
Toluene	108-88-3
Boric acid	10043-35-3
Boric acid	11113-50-1
Diboron trioxide	1303-86-2
Disodium octaborate	12008-41-2
Disodium tetraborate anhydrous	1303-96-4
Disodium tetraborate anhydrous	1330-43-4
Tetraboron disodium heptaoxide, hydrate	12267-73-1
Borate, zinc salt	12767-90-7

One parameters for facilities with direct discharge in the field of wastewater effluents (<u>Annex 5 (5.1)</u>) has been changed.

Parameter		Minimum	Advanced	Excellent
Before: Coliform	[bacteria/100ml]	400	100	25
New: E.coli	CFU/100 ml	126	126	126

Facilities with indirect discharge must no longer test the treated, discharged wastewater for conventional parameters.



Sludge testing has been simplified for our STeP customers. Only below groups must be tested:

Group	Limit value
Group 1: Alkylphenols (AP's) / Alkylphenolethoxylates (APEO's)	testing required
	Reporting Limit: 0.4
Group 7: Only Section Chlorinated toluenes	testing required
	Reporting Limit: 0.2
Group 12: Polycyclic aromatic hydrocarbons (PAH's)	testing required
	Reporting Limit: 0.6

Facilities producing Viscose (CV) and Modal (CMD) fibers do not require to test all parameters listed in the Standard under Annex 3, special requirements are mentioned under Annex 6 in the Standard.

These changes have the positive impact to be aligned with ZDHC requirements.

For more information on the new OEKO-TEX[®] test criteria, please contact OEKO-TEX[®] (<u>info@oeko-tex.com</u>) or your local OEKO-TEX[®] Institute (www.oeko-tex.com/institute).



After a three-month transition period, the new OEKO-TEX[®] STeP regulations will become binding on April 1, 2023.