

Customer information

OEKO-TEX® Standard 100 test criteria: New regulations in 2016

Zurich (mh) At the start of the year, the OEKO-TEX® Association has, as usual, updated the applicable test criteria and limit values for product certification in accordance with OEKO-TEX® Standard 100. After a three-month transition period, the following new regulations come into force on 1 April 2016 for all certifications:

- The following three substances and their salts have been newly incorporated into the test parameter “perfluorinated compounds” for all OEKO-TEX® product classes:

Perfluoroheptanoic acid (PFHpA) = C₇-PFCA = F₃C-(CF₂)₅-COOH

Perfluorononanoic acid (PFNA) = C₉-PFCA = F₃C-(CF₂)₇-COOH

Perfluorodecanoic acid (PFDA) = C₁₀-PFCA = F₃C-(CF₂)₈-COOH

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| Limit values <u>for each substance</u> : | product class I: | 0.05 mg/kg |
| | product class II and III: | 0.10 mg/kg |
| | product class IV: | 0.50 mg/kg |

By this, OEKO-TEX® takes into account that PFNA and its salts have been newly included in the REACH-ECHA SVHC candidate list (substances of very high concern) since December 2015. At the same time, this measure also closes the gap between the substances PFOA and PFUdA, which are already restricted in OEKO-TEX® Standard 100. And what is more, by this adaption OEKO-TEX® also further supports for the “Zero Discharge of Hazardous Chemicals (ZDHC) initiative” and the “Detox campaign”.

- Ten additional tin-organic compounds have been regulated with limit values for all product classes. The substances include:

Monobutyltin (MBT), monomethyltin (MMT), mono-octyltin (MOT), dimethyltin (DMT), diphenyltin (DPhT), tricyclohexyltin (TCyHT), trimethyltin (TMT), tri-octyltin (TOT), tripropyltin (TPT) and tetrabutyltin (TeBT).

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| The limit values <u>for each substance</u> are: | product class I: | 1.0 mg/kg |
| | product class II – IV: | 2.0 mg/kg |

- The substance di-cyclohexylphthalate (CAS no. 84-61-7) has been added to the list of softeners that are already regulated for all product classes. The Consumer Product Safety Commission (CPSC) in the US is currently making its final decision on whether di-cyclohexylphthalate will be integrated into the Consumer Product Safety Improvement Act (CPSIA).

In addition, the OEKO-TEX® Standard 100 now stipulates the following requirements for the regulated phthalates (softeners). As a result of these new requirements, stricter limit values have been defined for product classes II to IV in particular:

Product class I:

Sum of all phthalates mentioned in Annex 5: max. 0.1% (1000 mg/kg)

Product class II:

Sum of all phthalates mentioned in Annex 5: max. 0.1% (1000 mg/kg)

Product class III:

Sum of all phthalates mentioned in Annex 5: max. 0.1% (1000 mg/kg)

Product class IV:

No requirement for DINP (di-iso-nonylphthalate), sum of all other phthalates mentioned in Annex 5: max. 0.1% (1000 mg/kg)

- The new test parameter “UV stabilizers” has been added to product class IV. This test parameter regulates four substances with a limit value of 0.1% (= 1000 mg/kg) for each substance.

UV 320 = 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (CAS no. 3846-71-7)

UV 327 = 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (CAS no. 3864-99-1)

UV 328 = 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (CAS no. 25973-55-1)

UV 350 = 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (CAS no. 36437-37-3)

This reflects, among other things, the fact that these substances were added to the REACH-ECHA-SVHC candidate list in December 2014 and 2015.

- Due to new findings as part of recent OEKO-TEX® Association research activities, seven neonicotinoid substances have been added to the parameter "pesticides", and as such are now explicitly mentioned in the table of single substances in Annex 5 of the OEKO-TEX® Standard 100. These substances are:

| <u>Substance:</u> | <u>CAS no:</u> |
|-------------------|--------------------------|
| Acetamiprid | 135410-20-7, 160430-64-8 |
| Clothianidin | 210880-92-5 |
| Dinotefuran | 165252-70-0 |
| Imidacloprid | 138261-41-3, 105827-78-9 |
| Nitenpyram | 120738-89-8, 150824-47-8 |
| Thiacloprid | 111988-49-9 |
| Thiamethoxam | 153719-23-4 |

In addition, the substance Aldicarb, CAS no. 116-06-3, is now also regulated within the list of pesticides.

The existing OEKO-TEX® Standard 100 limit values for the sum of pesticide substances remain unchanged:

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| Product class I; sum of all pesticide substances: | max. 0.5 mg/kg |
| Product classes II - IV; sum of all pesticide substances: | max. 1.0 mg/kg |

- As to the parameter "chlorinated phenols", both monochlorinated and dichlorinated phenols have been newly regulated with the following limit values:

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| Sum of the three possible monochlorinated phenols: | product class I: | 0.5 mg/kg |
| | product classes II – IV: | 3.0 mg/kg |

| | | |
|--|--------------------------|-----------|
| Sum of the six possible dichlorinated phenols: | product class I: | 0.5 mg/kg |
| | product classes II – IV: | 3.0 mg/kg |

- As to the parameter "chlorinated benzenes and toluenes", monochlorobenzene has been added to the existing sum limit value:

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| Sum of the chlorinated benzenes and toluenes, product classes I to IV: | max. 1.0 mg/kg |
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- C.I. Basic Blue 26 (with $\geq 0.1\%$ Michler's Keton or Michler's Base; CAS no. 2580-56-5), C.I. Basic Violet 3 (with $\geq 0.1\%$ Michler's Keton or Michler's Base; CAS no. 548-62-9), Basic Green 4 (Malachite Green Chloride; CAS no. 569-64-2), Basic Green 4 (Malachite Green Oxalate; CAS no. 2437-29-8) and Basic Green 4 (Malachite Green; CAS no. 10309-95-2) has been added to the list of prohibited colourants classified as carcinogenic in Annex 5 of the OEKO-TEX® Standard 100. The inclusion of these substances means that requirements of the SVHC candidate list, the ZDHC initiative and the Detox campaign are covered.
- The OEKO-TEX® extraction method for the testing of materials for polycyclic aromatic hydrocarbons (PAHs) has once again been optimized. This may lead to higher PAH findings in comparison to previous laboratory tests. The existing limit values remain unchanged.
- The limit value for the sum of nonylphenol (NP), octylphenol (OP), nonylphenol ethoxylates NP(EO) and octylphenol ethoxylates OP(EO) has been changed in all OEKO-TEX® product classes:

Sum: NP + OP + NP(EO) + OP(EO): < 100 mg/kg

(Previously: NP + OP + NP(EO)₁₋₂₀ + OP(EO)₁₋₂₀: 100 mg/kg)

With these changes OEKO-TEX® is further contributing to the complete exclusion of NP, OP and alkylphenol ethoxylates from textile production, which is a goal striven for by the industry. Furthermore, by these changes OEKO-TEX® already covers a legal regulation that is planned under Annex XVII of REACH in advance. Thanks to the company audits that have been introduced worldwide, all the companies participating in the OEKO-TEX® system have been made aware of these particularly environmentally harmful and problematic substances in auxiliary agents.

- As is already required for the OEKO-TEX® product classes I to III, from 1 January 2016 only flame-retardant products that have previously been assessed to be harmless to health (based on the latest available technology), and that are included in the list of products accepted by OEKO-TEX®, can be used in product class IV (furnishing materials for decorative purposes). In the future, flame-retardant products may also be permitted for use only in product class IV.
- Three additional substances have been added to the existing list of explicitly prohibited flame-retardant products (Annex 5 of OEKO-TEX® Standard 100). As such, their use is also completely prohibited.

| <u>Substance:</u> | <u>CAS no:</u> |
|---|----------------|
| Bis(2,3-dibromopropyl)phosphate (BIS) | 5412-25-9 |
| Tetrabromobisphenol A (TBBPA) | 79-94-7 |
| 2,2-Bis(bromomethyl)-1,3-propan-diol (BBMP) | 3296-90-0 |

- Instead of 4,4'-diaminobiphenylmethane, which is mentioned in Annex 5 of the OEKO-TEX® Standard 100 under the category of “arylamines having carcinogenic properties”, the meanwhile more common name 4,4'-diaminodiphenylmethane will be used in the future. However, OEKO-TEX explicitly emphasizes that both names describe exactly the same chemical substance with the CAS no. 101-77-9.

With many of these measures, the OEKO-TEX® Association significantly supports both the “Zero Discharge of Hazardous Chemicals (ZDHC) initiative” and the “Detox campaign”. OEKO-TEX® has also made the textile production chain more aware of the need for responsible handling of potentially harmful substances in textile products and its pioneering role has contributed greatly to effective consumer protection.

With more than 150,000 certificates issued in total since 1992, more than 14,000 certifications in the last twelve months alone and growth of 5.7% in comparison to the previous year, the OEKO-TEX® Standard 100 Label has been able to cement its world leading position in the area of textiles tested for harmful substances. Since 2010, these product-based hazardous substance tests have been accompanied by comprehensive mandatory quality management audits worldwide. An evaluation of the audits performed up to this point shows that the company visits, which take place at least every three years, provide both an effective measure for ensuring human-ecological product quality and a valuable aid for certification in accordance with STeP by OEKO-TEX® as part of the quality management module.

In addition to hazardous substance testing, this has allowed the OEKO-TEX® Standard 100 and its extensive market sample testing, QM company audits, workshops, training sessions and talks by OEKO-TEX® experts on location to play a major role in finding and eliminating existing unknown weakpoints in operations, especially in relation to initiatives like ZDHC or Detox.

If you require more information about the new OEKO-TEX® test criteria, please contact the OEKO-TEX® Secretariat (info@oeko-tex.com) or your responsible OEKO-TEX® Institute or representative office (www.oeko-tex.com/institutes).



After a three-month transition period, the new OEKO-TEX® Standard 100 test criteria and limit values will become binding for all certifications on 1 April 2016.