

## STANDARD 100 by OEKO-TEX® test criteria: New regulations in 2018

At the start of the year, the OEKO-TEX® Association as usual updated the applicable test criteria and limit values for product certification in accordance with STANDARD 100 by OEKO-TEX®. The following new regulations come into effect on 01 April 2018 for all certifications, following a three-month transition period:

- At the parameter "Other chemical residues", more substances are now recorded for all product classes, referring here to:

Bisphenol A	Limit value for all product classes in Appendix 4:	0.1 %
	Limit value for all product classes in Appendix 6:	0.025 %
Phenol	Limit value for product class I (in Appendix 4 and 6):	20 mg/kg
	Limit values for product classes II to IV (in Appendix 4 and 6):	50 mg/kg
Aniline	Limit value for all product classes in Appendix 4 and 6:	100 mg/kg

Bisphenol A is included in the ECHA-SVHC candidate list (substances of very high concern) and can be contained in plastic materials and plastisol print, for example. Phenol can be absorbed through the skin. It is classified as poisonous, corrosive and health hazardous and is suspected to cause genetic defects. Phenol can be found in foams, for example. The aromatic amine aniline is classified in MAK group III category 4 by the DFG Senate Commission for testing of hazardous working materials. Aniline is signaled, amongst others, with "Suspected of causing cancer" (H351) and "Suspected of causing genetic defects" (H341) by the European Chemical Agency ECHA.

If one (or more) of these substances is found as chemical residue to exceed the respective limit values during sample testing, then the sample cannot be certified.

- The following substance groups are recorded additionally in the parameter “Surfactant, wetting agent residues”:  
Heptylphenol, branched and linear, and pentyphenol, branched and linear. The total limit values for alkyphenols and alkyphenol ethoxylates remain unchanged.

Heptylphenol, branched and linear, and 4-tert.-pentyphenol (p-1,1-[dimethylpropyl]phenol) are classified as “substances of very high concern” in the ECHA candidate list.

- From 2018, in STANDARD 100 by OEKO-TEX®, it will be also tested for azo colorants, which can separate the aromatic amine aniline under reductive conditions. Aniline is classified in MAK group III category 4. Aniline is signalized, amongst others, with “Suspected of causing cancer” (H351) and “Suspected of causing genetic defects” (H341) by ECHA. The limit value for aniline is 100 mg/kg for all four product classes - in both Appendix 4 and Appendix 6.
- In Appendix 6 of STANDARD 100 by OEKO-TEX®, various modifications for solvent residues of N-methylpyrrolidone (NMP), dimethylacetamide (DMAc) und dimethylformamide (DMF) are undertaken to better account for the current and technically feasible level in the production of diverse fibre materials. Changes are referenced in Appendix 6 of the standard.
- The limit value for ortho-phenylphenol (OPP) is lowered for all product classes. In Appendix 4 of STANDARD 100, the limit value for product class I is now 10 mg/kg, for product class II to IV it is fixed at 25 mg/kg. In Appendix 6 of STANDARD 100 by OEKO-TEX®, the limit value 10 mg/kg applies for OPP in all product classes.
- The limit value for the group of short-chain chlorinated paraffins, which are also included on the ECHA-SVHC candidate list, is lowered to 100 mg/kg for all product classes in Appendix 4. For certifications per Appendix 6 of STANDARD 100 by OEKO-TEX®, the limit value 50 mg/kg applies as before.

- For better comparison with RSL lists from NGOs, retail chains, etc., the requirements of chromium(VI) and various colourants in the tables of Appendix 4 or Appendix 6 are now shown directly in mg/kg. In comparison to version 2017 of STANDARD 100 by OEKO-TEX®, this does not constitute changes in reference to the requirements themselves, but should solely contribute to easier understanding.
- Finally, the substance quinoline is to be found at the parameter “Other chemical residues” with the requirement “under observation”. This means that quinoline randomly is now also tested for during OEKO-TEX® testing and the result is passed on to the applicant for information purposes. However, quinoline currently does not have a limit value. Quinoline is or can be used for the production of colorants and some other chemical auxiliaries. The substance is classified as a CMR substance (carcinogenic, mutagenic or toxic to reproduction substance) by ECHA and is discussed in ECHA work groups under the theme “CMR substances in textiles”. The OEKO-TEX® Association progresses proactively here and with the new concept “under observation” collects important information as a first step regarding the actual relevance of quinoline in textile materials and clothing accessories.
- The requirement for water fastness is increased in product class I from the previous value “Grade 3” to “Grade 3-4”. In the future, it is thus possible to confirm the Chinese requirement GB 18401:2010 on the OEKO-TEX® certificate (with the exception of labelling requirements). GB 18401:2010 places requirements on, amongst others, the pH value, formaldehyde, banned azo colorants, various colour fastnesses and smell.
- To the 01 April OEKO-TEX® plans to incorporate in the STANDARD 100 a testing for genetically modified organisms (GMO) for products made of bio-cotton.

Through many of these new requirements, the OEKO-TEX® Association strongly supports not only the “Zero Discharge of Hazardous Chemicals (ZDHC)” initiative but also the “Detox Campaign”. In this way, OEKO-TEX® is able to strengthen awareness concerning responsible handling of potentially hazardous substances in textile products throughout the textile manufacturing chain and to play a pioneering role in contributing to effective consumer protection.

For more information on the new OEKO-TEX® test criteria, please contact the OEKO-TEX® Secretariat ([info@oeko-tex.com](mailto:info@oeko-tex.com)) or your responsible OEKO-TEX® Institute ([www.oeko-tex.com/institutes](http://www.oeko-tex.com/institutes)).