

Customer information

Harmful substances in children's clothing

OEKO-TEX® certified products are safe for consumers

Zurich (hm) In its study "*A little story about the monsters in your closet*" published in mid January, the environmental organisation Greenpeace criticised numerous discoveries of harmful substances in children's clothing from renowned brand manufacturers. In connection with this, the OEKO-TEX® Association expressly states that children's clothing that meets the strict requirements of OEKO-TEX® Standard 100 does not pose any health risks for consumers.

For all the parameters (nonylphenol ethoxylates, carcinogenic arylamines, phthalates/softeners, organotin compounds, perfluorinated compounds (PFCs) and antimony) included by Greenpeace in the tested samples, the OEKO-TEX® Standard 100 requires compliance with strict requirements. The annually updated test criteria and limit values in many cases go far beyond the valid national and international requirements. From a consumer point of view, over 20 years of experience as a leading certification system for independent testing for harmful substances contributes to the highest degree of product safety. Extensive product checks after the certificate has been issued, as well as regular company audits, also ensure that the industry has a globally sustainable awareness of the responsible use of chemicals.

Since 1992, the central focus of the OEKO-TEX® tests for harmful substances has been the development of test criteria, limit values, and test methods on a scientific basis. The aim of the OEKO-TEX® laboratory tests, however, is not just to detect chemical substances, which, as a result of today's technical possibilities, can be done down to the smallest µg quantities. Rather, the decisive factor for the wearer (child) is whether, through usual skin contact when wearing the clothing, for example, substances really can enter the body and cause health problems. Here, OEKO-TEX® has created an internationally applicable yardstick that can be easily understood by the consumer through the "Confidence in Textiles" label.

For the sake of objective consumer information, it should also be mentioned in connection with the Greenpeace report that some of the criticised chemicals are in no way limited to a use in textiles, and can also be found in products in everyday use. Perfluorinated substances (PFCs), for example, can be found in Teflon coatings for various kitchen utensils (e.g. frying pans) or are approved for functional food packaging, where they are subject to far more drastic and sensitive conditions of use than textiles. Surgical clothing can also be finished with PFCs for barrier protection. Antimony is a component of practically all textile articles made of polyester materials and occurs in most PET beverage bottles and other plastic packaging.

Conclusion:

With its criteria for hazardous substance testing for textiles (OEKO-TEX® Standard 100) - as well as the additionally offered certification of environmentally friendly and socially responsible production facilities (STeP by OEKO-TEX®), the holistic approach of which also explicitly includes responsible chemicals management and sustainable manufacturing technologies - OEKO-TEX® specifically helps all companies and retail chains in the textile industry to optimise their production chains with regard to harmful chemicals in line with the "Zero Discharge of Hazardous Chemicals" (ZDHC) and detox campaigns respectively. In addition, in the store, end consumers are provided with a useful aid to decision-making when buying textile products of all kinds thanks to the label "Confidence in Textiles – tested for harmful substances in accordance with OEKO-TEX® Standard 100".

See the attachment for further information about the parameters.



OEKO-TEX® Standard 100 is an independent testing and certification system for raw, intermediate and finished textile products in all processing stages. Involving around 10,000 companies along the entire textile chain and more than 125,000 issued certificates for millions of articles, it is the most important label in the world for textiles tested for harmful substances.



"Sustainable Textile Production (STeP) by OEKO-TEX®" is an independent certification system for brands, retailers, and manufacturers from the textile chain who want to communicate their achievements regarding sustainable production to the public in a transparent, credible, and clear manner. Certification is possible for production facilities of all processing stages from fibre production, spinning mills, weaving mills, and knitting mills to finishing facilities and manufacturers of ready-made textile items.

Attachment

Background information on the chemicals discussed in the Greenpeace study

Perfluorinated compounds (PFCs)

Although, at present, legal requirements only exist for the use of perfluorooctane sulfonates (PFOS) with a limit value 1.0 µg/m², the use of perfluorooctanoic acid (PFOA) has also been severely restricted as part of OEKO-TEX® Standard 100 certification since 2009. Four other perfluorinated substances (PFCs) have been included in the 2014 edition. The limit values set by OEKO-TEX® are far stricter than those defined for these substances in REACH as substances of very high concern (SVHC) (obligation to notify at > 0.1 % ≡ > 1000 mg/kg). A strict check method is used to ensure that requirements are met. This means that for several years already, manufacturers have been made aware of the fact that they need to restrict the use of these extremely environmentally persistent substances and replace them with alternatives. This once again documents the pioneering role of the OEKO-TEX® Standard 100 in preventive consumer protection.

Phthalates

The OEKO-TEX® Association does not believe that it would be sensible to stigmatise items containing phthalate concentrations in the low mg/kg range (as happened to some extent in the Greenpeace study) since it is important to remember that phthalates are ubiquitous in the environment, so low concentrations are not necessarily due to deliberate, traceable usage. For precisely this reason, legislators set a limit value of 1000 mg/kg (= 0.1 %), which applies e.g. for children's toys and nipples in baby products.

Antimony

While the antimony content was determined after complete destruction of the test sample in the Greenpeace study, the antimony content that can be extracted - and is therefore available to the consumer - is tested in the OEKO-TEX® Standard 100. Tests clearly show that only a small fraction of the antimony contained in practically all polyester materials can be released under realistic extraction conditions (simulating the wearing of clothing) with an artificially acidic sweat solution.

Carcinogenic arylamines

Carcinogenic arylamines, which can be separated by certain azo colourants, must meet far stricter criteria in the OEKO-TEX® Standard 100 than those demanded by legislators e.g. at European level.

Nonylphenol ethoxylates/nonylphenol

Although most nonylphenol ethoxylates (NPEOs) which are used mainly as tensides in textile production are primarily environmentally harmful substances, nonylphenol and octylphenol as well as their ethoxylates were included in the criteria catalogue for hazardous substance testing in accordance with the OEKO-TEX® Standard 100 in 2012 and in the current edition, the limit values have once again been made significantly more restrictive. NPEOs had already been excluded from the certification of environmentally friendly and socially responsible production facilities in accordance with STeP by OEKO-TEX®.

Organotin compounds

Tributyltin and dibutyltin have had to meet strict criteria in the OEKO-TEX® Standard 100 since 2000. In subsequent years, triphenyltin and dioctyltin were also included. While REACH (Regulation (EC) No. 1907/2006) sets a very high value of 0.1 % (= 1000 mg/kg) in Annex XVII, these substances have to meet far stricter requirements in the OEKO-TEX® Standard 100:

<i>Baby products:</i>	<i>TBT and TPhT: 0.5 mg/kg</i>	<i>DBT and DOT: 1.0 mg/kg</i>
<i>Products in contact with skin:</i>	<i>TBT and TPhT: 1.0 mg/kg</i>	<i>DBT and DOT: 2.0 mg/kg</i>

Organotin compounds are banned as biologically active finishes in the OEKO-TEX® Standard 100 in general.

The other test criteria contained in the OEKO-TEX® Standard 100 can be found at www.OEKO-TEX.com/limitvalues.