Oeko-Tex Standard 100 – Opens Unlimited Textile Markets

Oeko-Tex Standard 100 – Confidence in Textiles – Worldwide

Transparency for producers, retailers and consumers

Towards a product optimised for human ecology

The textile chain is strongly characterised by being based on the division of labour between the raw material and the finished textile product, often every individual production stage is carried out in a different part of the world. From one country to another, there are very different environmental standards for production, and the importance attached to testing textiles for harmful substances varies widely. Since, at the same time, the expectations of the retail trade and the end user regarding the properties and quality of the products they buy are becoming ever higher, testing the materials used in production processes is becoming more and more important.

"Confidence in Textiles" is synonymous worldwide with responsible textile manufacture – from the raw materials to the finished product on the shelf. This is just as true for production companies and retailers along the textile chain as it is for the wearers of fashionable, functional and colourful textiles.

What led to the development of the Oeko-Tex Standard 100

Until the early 1990s, there was no reliable product label by which consumers could judge the human ecology properties of textiles. Nor was there a standard benchmark for safety which could be used by companies in the textile and clothing industry, allowing them to assess the harmful substances in textile products in a practical, i.e. realistic, use-based way. It was against this background that the Austrian Textile Research Institute (ÖTI) and the German Hohenstein Research Institute worked together to develop the Oeko-Tex Standard 100, on the basis of their existing test standards.

Tough and compulsory

Oeko-Tex certification is not merely a declaration of a desire to make products that are optimised for human ecology. Products can only be endorsed with the "Confidence in Textiles" label after they have been thoroughly tested to ensure that they comply with the extensive list of criteria. Therein lies the reliability.

Among the first companies to gain Oeko-Tex certification were manufacturers of underwear, baby clothing and domestic textiles in Germany, Austria and Switzerland. Just one year after the launch of the product label, there were already 214 companies in these countries at all stages of textile processing, which were taking part in the Oeko-Tex certification system. Today, over 7500 companies all around the world are involved in the Oeko-Tex certification system.

People and the textile chain

With its comprehensive list of criteria, the Oeko-Tex Standard 100 gives the industry, retailers and consumers the confidence they need in textiles of all types.
With over 60,000 certificates issued and millions of textile products endorsed with the “Confidence in Textiles” label, it is the world’s most well-known quality mark for textiles tested for harmful substances.

Growing international network

Nearly two thirds of all Oeko-Tex certificates are issued in countries in the European market, and about one third in Asia. The remainder are spread between the continents of America, Africa and Australia.

A modular concept for success:

Components of the Oeko-Tex system

Exactly how are the objectives of the Oeko-Tex system achieved? How is it guaranteed that the standards for testing for harmful substances remain consistent for textile and clothing manufacturers? And what reliable safety standards does the Oeko-Tex label offer consumers?

Thanks to its modular structure, the unique Oeko-Tex system can cope with all the complex requirements of textile production, and comprises:

- Test criteria that are consistent worldwide and based on science (relevant to textile and human ecology)
- Annual reassessment and further development of the defined limit values and criteria
- Testing and certification of textile products by independent test institutes with appropriate specialist expertise
- Compliance with legal requirements for chemicals relevant to textile production
- Testing of textile raw materials and intermediate and end products carried out at all stages of processing (modular principle)

With Oeko-Tex certificated preliminary materials, testing costs are reduced along the textile chain.

- Operational quality management at production companies
- Product monitoring by regular random checks in the market and factory inspections by independent auditors of the Oeko-Tex Association

The Oeko-Tex Standard 100 ensures product safety right from the starting materials. For example, natural fibres are tested for possible pesticide residues.
Benefits for all concerned

Benefits for consumers:

Aid in decision-making:
• With the Oeko-Tex label, the consumer has a reliable product endorsement which helps with making purchasing decisions.

Quality:
• Consumers who are deliberately looking for textiles that are not harmful to their health value the combination of high-quality, modern, functional textiles with safety from the health point of view.

Confidence:
• Product testing by independent members of the Oeko-Tex Association who are well-known test institutes makes it entirely trustworthy.

Benefits for industry and retailers:

Transparency:
• The fact that the criteria are internationally applicable makes for transparency and comparability, leading to improved safety standards in production and a more rapid flow of information.

Convenience:
• Manufacturers and retailers wishing to provide their customers with textile products that are not harmful to health benefit from having simplified, consistent conditions for delivery.

Safety:
• The fact that the test criteria are constantly being further refined ensures continuing improvements in product safety.

Success:
• Certification opens up new markets and selling opportunities.

Efficiency:
• The ideal supplement to manufacturers’ and retailers’ own quality control systems.

Economy:
• The modular system offers great potential for cutting costs, by using preliminary products that have an Oeko-Tex certificate.

Trustworthiness:
• The Oeko-Tex label is an additional selling point.

The Oeko-Tex certificate opens doors worldwide and gives companies right along the textile chain access to world markets.

The requirements of the list of criteria are consistent worldwide, creating transparency and simplifying the movement of goods within the textile chain.

www.oeko-tex.com  – Opens Unlimited Textile Markets

Confidence in Textiles – Worldwide
Oeko-Tex Standard 100: The safety concept for textile confidence

The Oeko-Tex Standard 100 is a test and certification system for textile raw materials, intermediate and end products at all processing stages that is consistent worldwide.

The tests for harmful substances include testing for legally banned and controlled substances, and chemicals that are known to be harmful to health, as well as parameters serving a precautionary purpose.

Products and groups of articles that have been tested successfully can be endorsed by the manufacturer with the Oeko-Tex label and advertised accordingly. Once a certificate has been issued, it is valid for one year, and can be extended on request.

The key objectives of the Oeko-Tex Standard 100 are:

• to produce textile products of all kinds that are safe from a human ecology point of view
• to simplify and speed up terms of delivery for manufacturers and retailers who want to offer their customers textile products that are not harmful to health
• reliable product endorsement for consumers who deliberately look for textiles that are not harmful to health

Success through international cooperation

Thanks to the Oeko-Tex label, all companies involved internationally speak with a common language. Manufacturers who have their end products certificated can work with suppliers such as yarn, fabric and knitwear producers, dye houses and accessories manufacturers all over the world who are equally proactive when it comes to human ecology. The manufacturers of dyes and producers of textile auxiliary products also incorporate the Oeko-Tex requirements into their product development. This progress in development is contributing to the growing internationalism of the Oeko-Tex network. The test institutes support this through their intensive work on merchandise testing and research.

The tests and certification processes under the Oeko-Tex Standard 100 extend to all products at all processing stages and therefore bring the whole textile chain into the system.
Important commercial advantages
The option of having products tested according to the Oeko-Tex Standard 100 at all processing stages allows manufacturers to cut costs, because it is easier to choose suppliers and to avoid duplicate testing. Using certificated preliminary products in this way, for example, saves garment manufacturers as the last link in the textile chain the expense of numerous materials tests, since sources of possible harmful substances have already been excluded at earlier stages.

Oeko-Tex inside – Transparency for the user
For many consumers in target markets such as Europe or Japan, evidence that textile products are not harmful to health is playing a more and more important role in their buying decisions. The spread and increased recognition of the Oeko-Tex Standard 100 also help ensure that the Oeko-Tex label is now almost like a brand name and is actively sought after by consumers.

Against this background, endorsing their goods with the Oeko-Tex label offers all textile and clothing manufacturers an effective way of drawing attention to the fact that their products are optimised for human ecology.

Manufacturers of branded articles can also benefit from this added value. At www.oeko-tex.com, consumers can see for themselves:
- which products have been tested for compliance with the Oeko-Tex Standard 100 – even if they do not visibly bear the label
- which companies take part in the Oeko-Tex system
- which brand-name articles also offer the security of Oeko-Tex

Companies taking part in the Oeko-Tex system benefit from the knowledge that they are producing textiles that are not harmful to health, and so are offering consumers a real aid in decision-making when they are purchasing textiles.

The aim of the Oeko-Tex Association is to offer manufacturers and retailers around the world an efficient service based on practical experience of testing for harmful substances.
The reliable way to certification: Consistent test standards worldwide

Strict test criteria for textiles optimised for human ecology
The Oeko-Tex Standard 100 excludes harmful substances or controls their use. The following parameters are included in the Oeko-Tex list of criteria:

- banned MAK amines in specific AZO dyes
- other carcinogenic and allergenic dyes
- formaldehyde
- pesticides
- phthalates
- chloroaromatic compounds
- extractable heavy metals: Ni, Cd, Cr III, Cr VI etc.
- colourfastness
- pH value
- phthalates in baby articles (Product Class I) and textiles worn next to the skin (Product Class II)
- organic tin compounds (TBT and DBT)
- emissions of volatile components
- odour
- bromides and flame-retardant treatments are regulated separately

Testing by product class
The testing for harmful substances under Oeko-Tex Standard 100 is always determined by the particular purpose of the textiles. This is why the rule is: the more closely a textile is in contact with the skin (and the more sensitive the skin), the stricter the criteria for human ecology which must be met.

The main focus: practical evaluation
The aim of the comprehensive Oeko-Tex laboratory testing is to arrive at a realistic and practical evaluation of how the products can be optimised for human ecology.

Distribution of certificates in the product classes (as of 2007):
- Product Class II: 57%
- Product Class I: 36%
- Product Class IV: 5%
- Product Class III: 2%

In the testing process, many companies voluntarily subject their products to the particularly strict criteria for Product Classes I and II.

Textile products are assigned to one of four different product classes:

- Product Class I: Textiles and textile toys for babies and toddlers
- Product Class II: Textiles where a large part of the surface area is in direct contact with the skin
- Product Class III: Textiles which do not come into contact with the skin or for only a small part of their surface area
- Product Class IV: Furnishing materials for decorative purposes

The highly specialised, reliable test methods of the Oeko-Tex institutes promote high-quality standards for textile products.
A close-knit network for greater reliability: Step by step to certification

The certification of textile products (including accessories) under Oeko-Tex Standard 100 is carried out on the basis of a clearly defined contract and follows a defined procedure to which all authorised Oeko-Tex test institutes must subscribe. Depending on how many of the starting materials for the completed textile article have already been certified, the costs incurred, apart from the licensing fee, are only for the actual work carried out in the laboratory. Participating companies benefit here from the closely-knit, ever-expanding Oeko-Tex network.

Inspections
Every year, the International Oeko-Tex Association carries out test inspections on at least 15% of all issued certificates. These comprise unannounced random samples at participating companies, as well as products that are bought on the open market. In addition, auditors go into the factories themselves and carry out inspections there. The Oeko-Tex Association bears the cost of the inspections itself unless it finds any grounds for complaint.

Other information
The committed staff and experts at the testing institutes and their representative offices as well as at the authorised certification centres will be pleased to provide detailed information about the procedures, the production requirements and the benefits of Oeko-Tex certification. They organise regular free seminars and customer training sessions. Further information and brochures to download are available at www.oeko-tex.com.

www.oeko-tex.com – Opens Unlimited Textile Markets
The Oeko-Tex Standard 1000:
confirmation of more environmentally-
compatible production

Supplementing the product-related Oeko-Tex Standard 100, the Oeko-Tex Standard 1000 is a system for testing, auditing and certificating environmentally-friendly production facilities along the textile chain.

For certification under Oeko-Tex Standard 1000, companies must comply with set criteria in relation to their environmentally-compatible manufacturing processes and provide evidence that at least 30% of their total output is already certificated under Oeko-Tex Standard 100.

The necessary criteria include:
- excluding environmentally harmful auxiliary products and dyes
- keeping to guideline standards for purification of waste air and water
- using energy economically
- avoiding noise and dust
- taking specific measures to guarantee safety in the workplace
- no use of child labour / socially responsible employment
- existence or introduction of basic elements of an environmental management system

The necessary criteria include:
- documentation proving effectively that the ecological measures taken at a production site have been objectively verified
- more efficient production leading to reduced costs
- waste reduced to a minimum
- better acceptance of their products in the market

The factory is inspected by an independent auditor from one of the member institutes of “Oeko-Tex International – Testing Association for Environmentally Friendly Textiles”. The certificate is valid for three years and can be renewed on request.

Benefits
Certification of their production processes under Oeko-Tex Standard 1000 offers textile and clothing companies:
- documentation proving effectively that the ecological measures taken at a production site have been objectively verified
- better acceptance of their products in the market
- more efficient production leading to reduced costs
- waste reduced to a minimum
- documentation proving effectively that the ecological measures taken at a production site have been objectively verified

Putting the dot on the i: Oeko-Tex 100plus
The product label Oeko-Tex Standard 100plus gives textile and clothing manufacturers the opportunity to demonstrate to consumers not only that their products are optimised for human ecology but also that they are making efforts in terms of ecological production methods.

Companies can be awarded this endorsement if the articles they make have been successfully certificated under Oeko-Tex Standard 100 and they can also prove that the entire production chain – i.e. all production facilities involved in the manufacture of an article – complies without exception with the requirements of the Oeko-Tex Standard 1000.

The Oeko-Tex Standard 100plus label has made it possible for consumers to see not only when products have been optimised for human ecology but also when steps have been taken towards using ecological production processes.

Confidence in Textiles – Worldwide

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A global network: the Oeko-Tex Association

Global expertise, global progress in textile research
The International Oeko-Tex Association is made up of 14 well-known textile research and testing institutes in Europe and Japan, with representative offices and points of contact in over 40 countries around the world. Activities reaching far beyond country borders and the growing number of certifications worldwide mean that the Oeko-Tex network is seeing steady growth.

With their diverse and wide-ranging expertise, the Oeko-Tex member institutes also provide a vital stimulus for innovation within the textile and clothing industry, all round the globe. Depending on their special areas of interest, the individual institutes concentrate not only on goods testing but also on fundamental research or application-based problem solving. At all stages of processing, their testing system makes a major contribution to the development of high-quality textile products.

The Oeko-Tex test institutes are remarkable for the following reasons:
- a strictly scientific, independent approach to their work
- high degree of innovation
- many years of experience and knowledge in many different parts of the textile chain
- highly specialised, reliable test methods for guaranteeing the quality of textile products
- a close-knit network and regular flow of information between members
- binding test methods and criteria, combined with regular ring tests within the international testing association to ensure a consistent and high-quality standard of testing
- auditing of the test institutes to monitor and provide training in the quality of testing, provided by representatives of the international Oeko-Tex Association
- training courses and opportunities to share knowledge and experience in the course of regular technical conferences

The independence of the institutes increases the trustworthiness of the Oeko-Tex label. The external testing guarantees business partners and consumers high-quality standards.
The label “Confidence in Textiles” can be found in nearly all product segments of the retail trade and has virtually become a trademark.

The safety requirements for textiles tested for harmful substances are checked regularly and republished every year.

Into the Oeko-Tex world at the click of a mouse:
www.oeko-tex.com

The International Oeko-Tex Association is, of course, also represented on the World Wide Web. At www.oeko-tex.com, Oeko-Tex licence-holders and other interested companies and consumers can find the latest information, which is now available in nine languages: German, English, French, Chinese, Italian, Spanish, Portuguese, Japanese, and Turkish.

The online content includes the philosophy and origins behind Oeko-Tex testing for harmful substances, a description of the Oeko-Tex product classes and the latest version of the list of criteria, the elements making up a contract for Oeko-Tex certification, advice on using the Oeko-Tex label and much more besides. The latest news can be viewed in the Press and Newsletter archive on the website.

Additional services are provided by numerous interactive functions such as searching for possible suppliers with certified preliminary materials, an overview of Oeko-Tex certified brand-name products, an extensive download area and a calendar with search function.
Countless buyers along the textile chain now require compliance with Oeko-Tex criteria as a permanent part of their terms and conditions for delivery.

**Textile research and testing institutes, and representative offices of the International Oeko-Tex Association**

**Austria**
- Institut für Ökologie, Technik und Industrie
  - www.oeri.at

**Bangladesh**
- Hohenstein Institutes Bangladesh
  - www.hohenstein.de

**Belgium**
- Institut für Ökologie, Technik und Industrie
  - www.oeti.at

**Brazil**
- CITEVE Brasil
  - www.citeve.pt

**Bulgaria**
- Hohenstein Institutes Bulgaria
  - www.hohenstein.de

**China / Shanghai**
- CITEVE
  - www.testex.com

**China / Beijing**
- CITEVE
  - www.testex.com

**Denmark**
- DTI Tekstil, Teknologisk Institut
  - www.teknologisk.dk

**Egypt**
- OETI Egypt
  - www.oeti.at

**France**
- IFTH Institut Français Textile et de l'Habillement
  - www.ifth.org

**Germany**
- Forschungsinstitut Hohenstein
  - www.hohenstein.de
- Shirley Technologies Ltd.
  - www.shirleytech.co.uk

**Greece**
- CLOTPEL (ETIKI)
  - www.etikes.gr

**Hong Kong**
- CITEVE
  - Centro Tecnológico das Indústrias Textile e do Vestuário de Portugal
  - www.citeve.pt

**India / Mumbai**
- Hohenstein India Pvt. Ltd.
  - www.hohenstein.de

**India / Tirupur**
- Hohenstein India Pvt. Ltd.
  - www.hohenstein.de

**Indonesia**
- CITEVE
  - www.testex.com

**Italy**
- Centro Tessile Giotto e Abbigliamento S.P.A.
  - www.centrotas.it

**Japan**
- NISSIN T-KEN
  - Japan Dyes Inspection
  - Institute Foundation
  - www.ho-ho.ne.jp/shen-senkai

**Korea (South)**
- CITEVE
  - www.testex.com

**Malaysia**
- CITEVE
  - www.testex.com

**Mexico**
- Hohenstein Institutes Mexico
  - www.hohenstein.de

**Netherlands**
- Hohenstein Instituut Nederland
  - www.hohenstein.nl

**Peru**
- Hohenstein Instituut Peru
  - www.hohenstein.de

**Poland**
- Institute Hohenstein România
  - www.hohenstein.de

**Portugal**
- CITEVE
  - Centro Tecnológico das Indústrias Textil e do Vestuário de Portugal
  - www.citeve.pt

**Romania**
- Instituto Hohenstein România
  - www.hohenstein.de

**Russia**
- Forschungsinstitut Hohenstein Rus
  - www.hohenstein.de

**Singapore**
- CITEVE
  - www.testex.com

**Spain**
- AITEX
  - Instituto Tecnológico Textil
  - www.aitex.es

**Sri Lanka**
- Hohenstein Institutes Sri Lanka Liaison Office
  - www.hohenstein.de

**Sweden**
- IFP Research AB
  - www.ifp.se

**Switzerland**
- CITEVE
  - www.testex.com

**Taiwan**
- CITEVE
  - www.testex.com

**Thailand**
- Hohenstein Institutes Thailand
  - www.hohenstein.de

**Turkey**
- Forschungsinstitut Hohenstein
  - www.hohenstein.com.tr

**USA**
- Hohenstein Institutes
  - www.hohenstein.com

**Vietnam**
- Hohenstein Institutes Vietnam
  - www.hohenstein.de

**Certification centres**

**France**
- AQUAL
  - Association pour la Promotion de l’Assurance Qualité dans la Filière Textile-Habillement

**Germany**
- Deutsche Zertifizierungsstelle Oeko-Tex
  - www.oeko-tex.com

**China / Beijing**
- CITEVE
  - www.testex.com

**Other Representative Offices**

**Poland**
- Shirley Technologies Ltd.
  - www.shirleytech.co.uk

**South Africa**
- Shirley Technologies Ltd.
  - www.shirleytech.co.uk

**USA**
- Hohenstein Institutes
  - www.hohenstein.com

**Vietnam**
- Hohenstein Institutes Vietnam
  - www.hohenstein.de