Range of services overview

Department Personal Protective Equipment (PPE)

Since 1967 - reliable, high-quality consulting, testing and certification worldwide

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OETI - Institut fuer Oekologie, Technik und Innovation GmbH | Siebenhirtenstrasse 12A, Objekt 8, 1230 Vienna, Austria
tel +43 1 5442543-0 | e-mail office@oeti.biz | www.oeti.biz | FN 326826 b | VAT No. ATU65149029

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Service information

OETI - Institute for Ecology, Technology and Innovation GmbH is accredited and notified as testing laboratory for Personal Protective Equipment (PPE). All tests are subject to a quality management program according to EN ISO 17025. Our certifications are performed under NB 0534.

This services overview is based on a list of the most common and most important tests (mainly according to EN, ISO and EN/ISO standards). Yet, OETI offers a vast range of other services and tests, which we are happy to quote for you upon request.

Orders are accepted in writing (letter, e-mail, fax), by phone and in person. Please note that we will only issue order confirmations on special requests. Tests marked with "*)" will be tested with suitable subcontractors if required.

Our terms and conditions apply. Our current T&C's are published on our webpage (www.oeti.biz).

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Our main standards for certification of PPE (CE marking)

Protective clothing	
EN ISO 13688	Protective clothing – General requirements
EN 343	Protection against rain
EN 13034	Protective clothing against liquid chemicals Type 6 and Type PB[6]
EN 14126	Performance requirements and test methods for protective clothing against infective agents
EN ISO 20471	High visibility clothing
EN 17353	Protective clothing - Enhanced visibility equipment for medium risk situations - Test methods and requirements
EN 13758-2	Solar UV protective properties Part 2: Classification and marking of apparel
EN 14058	Protective clothing - Garments for protection against cool environments
EN ISO 27065	Protective clothing - Performance requirements for protective clothing worn by operators applying pesticides and for re-entry workers
Protective clothing for firefighters	
EN 469	Protective clothing for firefighters
EN ISO 15384	Protective clothing for firefighters — Laboratory test methods and performance requirements for wildland firefighting clothing
EN 16689	Protective clothing for firefighters - Performance requirements for protective clothing for technical rescue
EN ISO 13911	Protective clothing for firefighters- Requirements and test methods for fire hoods for firefighters
Protective clothing against thermal hazards	
EN ISO 11611	Protective clothing for use in welding and allied processes
EN ISO 11612	Protective clothing - Clothing to protect against heat and flame
EN ISO 14116	Protection against heat and flame – Limited flame spread materials, material assemblies and clothing
EN 61482-2	Protective clothing against the thermal hazards of an electric arc

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Protective clothing - electrostatic properties	
EN 1149-5	Electrostatic properties
EN 50286	Electrical insulating protective clothing for low-voltage installations
Protective gloves	
EN ISO 21420	Protective gloves - General requirements
EN 388	Protective gloves against mechanical risks
EN 407	Protective gloves against thermal risks (heat and/or fire)
EN 511	Protective gloves against cold
EN 659	Protective gloves for firefighters
EN 12477	Protective gloves for welders
EN ISO 374-1	Protective gloves against dangerous chemicals and micro-organisms - Part 1: Terminology and performance requirements for chemical risks
EN ISO 374-5	Protective gloves against dangerous chemicals and micro-organisms - Part 5: Terminology and performance requirements for micro-organisms risks
EN 60903	Live working - Gloves of insulating material
Respiratory protective device	
EN 149	Filtering half masks to protect against particles — Requirements, testing, marking

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Tests for certification of personal protective equipment (PPE)

Tests / services:
Clothing Physiology – water vapour resistance (Ret-value) ISO 11092
Clothing Physiology – thermal resistance (Rct-value) ISO 11092
Clothing Physiology – water vapour permeability index ISO 11092
Bursting properties of fabrics EN ISO 13938-2
Resistance to damage by flexing – Method C "crumple/flex method" EN ISO 7854
Flex cracking test (artificial leather and similar sheet materials) DIN 53359
Tests for colour fastness (various methods)
Determination of maximum force and elongation at maximum force using the strip method EN ISO 13934-1, EN ISO 1421-1, ISO 9073-3 and various further methods
Determination of maximum force using the grab method (dry / wet) EN ISO 13934-2, EN ISO 1421-2 and various further methods
Air-permeability EN ISO 9237
Dimensional change after washing and drying EN ISO 5077
Seam tensile properties / slippage resistance of yarns at a ready-made seam EN ISO 13935 / EN ISO 13936 and various further methods
oil repellency / water repellency "3M-Test"
resistance to pilling and change of appearance of fabrics EN ISO 12945-2 and various further methods
Abrasion resistance of fabrics „Martindale method" EN ISO 12947-2 and various further methods
Parts UV- protection UV-Standard 801/ Solar UV protective properties EN 13758-13 / Sun protective clothing—Evaluation and classification AS/ NZS 4399
Water repellency of fabrics by the "Bundesmann rain-shower test" EN 29865
Resistance to surface wetting (Spray test) EN ISO 4920
Water absorption of fabrics DIN 53923
Tear force EN ISO 13937-2, EN ISO 13937-3, EN ISO 13937-4, EN ISO 4674, EN ISO 9073-4
Resistance to penetration by liquid chemicals EN ISO 6530
Resistance to penetration by liquids in form of a light spray (fog test) *) EN 13034
Resistance to penetration by water (Hydrostatic pressure test) EN 20811 / ISO 811
Chromatic coordinates and luminance factor EN ISO 20471 Pkt.7.2 - in new condition and after various pretreatments

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Electrical properties and antistatic properties

Tests / services:
Horizontal Resistance and Vertical Resistance DIN 54345-1
Electrostatic Charge (with 2 frictional partners) DIN 54345-4
Protective clothing - Vertical Resistance EN 1149-2
Protective clothing - Charge Decay *) EN 1149-3
Protective clothing - Surface Resistivity, Type A EN 1149-1

Tests for determining the behaviour when exposed to heat and / or flames

Tests / services:
Limited flame spread EN ISO 15025
burning behaviour of Fabrics for apparel EN 1103
Determination of ease of ignition of vertically oriented specimens EN ISO 6940
Flame spread properties of vertically oriented specimens EN ISO 6941
Contact heat transmission EN 702 / EN ISO 12127-1
Burning behaviour by oxygen index *) (LOI-Index) EN ISO 4589-2
Melting behaviour (Heat resistance of sewing thread) ISO 3146
Determination of the arc rating (ATPV and/or EBT50)of material or clothing *) Open Arc" according EN ISO 61482-1-1
Determination of arc protection class of material or clothing by using a constrained and directed arc *) (box test) EN ISO 61482-1-2
Heat transmission on exposure to flame EN ISO 9195
Thermal behaviour of materials and material assemblies when exposed to a source of radiant heat EN ISO 6942 (various methods)
Heat resistance (convective heat) ISO 17493
Resistance of materials to molten metal splash *) EN ISO 9185
determination of behaviour of materials on impact of small splashes of molten metal *) EN 348 / EN ISO 9150

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Protective gloves

Tests / services
Abrasion resistance EN 388
Cut resistance "Coupe-Test" EN 388
Tear resistance EN 388
Puncture resistance EN 388
TDM cut resistance test EN ISO 13997
Burning behaviour EN 407, EN ISO 6941
Measurement of flexibility "testing the dexterity" EN 420
Water penetration resistance of the entire glove ISO 15383

Tests to verify harmlessness

→ Please contact our Ecology department if you are interested in any of the tests below

→ ecology@oeti.biz

Tests / services:
Determination of pH of aqueous extract (pH-value) EN ISO 3071
Determination of certain aromatic amines derived from azo colorants EN 14362
Determination of chromium(VI) content (Leather) EN ISO 17075

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Department "Textile technology and personal protective equipment (PPE)"

Our core **competency in testing textiles** and **clothing** as well as **certifying personal protective equipment (PPE)** spans decades.

Our Austrian team of specialists certifies your PPE to acquire a CE-marking. According to PPE Regulation (EU) 2016/425 for personal protective equipment – clothing, that protects people against risks to life or health, must carry a CE mark. Equipment protecting against specific high risks (i.e. chemical-protection suits), other protective clothing like for example gardening gloves, protection from rain or cold as well as protective work clothing for construction workers (safety vests) are considered protective clothing.

In the area of "textile technology" our experts test textiles along the entire production chain - from fibers to fabrics, textile material composites to finished clothing.

Your advantages in a nutshell

- We are an **accredited and notified body** comprising a **testing laboratory** (EN ISO/IEC 17025) and certification centre for personal protective equipment (EN ISO/IEC 17065) in accordance with EU regulation 2016/425 (Notified Body No. 0534).
- We are approved and **notified by the Commission of the European Union** (Notified Body No. 0534). As a notified body we conduct type-examinations as well as supervised product checks at random intervals (module C2). Type-examinations issued by us are recognized Europe-wide.
- We have **decades of expertise** and a specialist team offering full service and safety in the areas of the certification of personal protective equipment (e.g. firefighter garments, gloves, FFP2 masks) to obtain CE marking.
- We **increase our customers' competitiveness**: We are a strong partner to our customers, who is familiar with the **European statutory requirements of PPE** and the required test parameters and who is committed to optimize product performance
- We can guarantee reliable, high-quality consulting, testing and certification services geared towards the **latest standards on the market.**

Your contacts in Austria

Head of Technology Textile Technology and Personal Protective Equipment (PPE),
Judith Pointner,
judith.pointner@oeti.biz
+43 1 5442543 - 28

Textile Technology and Personal Protective Equipment (PPE),
Marion Pfeiler,
marion.pfeiler@oeti.biz
+43 1 5442543 - 56

Competence creates confidence

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