PHÖNIX 5F

CERTIFICATIONS

EN 659:2003+A1:2008

CE 0534

EN 388:2016

4 4 4 3 F

All mechanical and thermal maximum values are achieved after pretreatment of 20 washes at 60 °C (washing procedure in accordance with ISO 6330 6N+A)

CARE INSTRUCTIONS

60° C

LCO_2 wash tested

SIZES

XXS	XS	S	M	L	XL	XXL	3XL
5	6	7	8	9	10	11	12

MATERIALS | TECHNOLOGIES

GORE® CROSSTECH® PRODUCTS

NOMEX®

PROmarble

KEVLAR®

2-belt system

3D CUT

SPECIAL FEATURES AT A GLANCE

- 3D cutting shape for an outstanding fit and freedom of movement
- Permanently waterproof
- Inseparable, patented attachment of the inner lining and insert with the shell
- Cutting protection level 4F

MODEL- AND COLOUR VARIANTS

8051/B Phönix 5F (long cuff)
8053/B Phönix-E 5F (knitted cuff)

PHÖNIX 5F

8051/B PHÖNIX 5F
LONG CUFF

8053/B PHÖNIX-E 5F
KNITTED CUFF

The textile firefighting glove Phönix 5F impresses with the best heat- and flame resistance as well as optimum wear comfort. The high-quality Kevlar® material with PROmarble coating on the backhand ensures high abrasion and heat protection. The incorporated stretch absorber with air cushioning protects against hits, knocks and heat. Furthermore, heat protection and dexterity get increased due to the movement folds on fingers and thumb. The abrasion-resistant palm with Nomex®/Kevlar® and PROmarble coating offers maximum protection and grip on smooth and wet surfaces. The revolutionary cut-resistant lining made of Kevlar®/Inox/LCP protects the firefighter against pointed objects and sharp edges (level 5F in new condition, 4F after 20 washes). Thanks to the GORE-TEX CROSSTECH® Grip insert, Phönix 5F provides a safe barrier against water, chemicals, oil, fuel, blood and viruses with, at the same time, maximum breathability. The inner lining is incorporated and the insert is attached and connected to the outer shell in line with the proven method patented by ESKA in order to permanently prevent the lining from being inadvertently pulled out. The sophisticated, adjustable two-strap system is used to ensure secure fixing, which enables the glove to be worn over a jacket (Phönix 5F, long cuff) or under a jacket (Phönix-E 5F, knitted cuff). All mechanical and thermal maximum values were achieved both in a new condition and after pretreatment consisting of 20 washes at 60 °C. The anatomical, layered 3D cut is adjusted to the natural posture of our hands, to guarantee the best possible fit and freedom of movement. We use only European materials, which undergo strict quality control in Austria. The gloves for firefighters are available in versions with a long cuff (Phönix 5F model) or with a 100% Kevlar® knitted cuff (Phönix-E 5F model).

DETAILS

- **Material**
  Backhand: Flame-resistant Kevlar® with silicone/carbon coating
  Palm: Nomex®/Kevlar® with PROmarble coating (granite-silicone-carbon) for extremely high performance protection and maximum grip

- **Lining**
  Backhand: Kevlar® (multilayer structure for better heat- and cut protection performance)
  Palm: Revolutionary cut-resistant lining made of Kevlar®/Inox/LCP

- **Insert:** GORE-TEX CROSSTECH®-Grip insert protects against water, chemicals, oil, fuel, blood and viruses with, at the same time, maximum breathability

- **Sizes:** 5 (XXS) - 12 (XXXL) + Made to measure (www.eskagloves.com)

CERTIFICATIONS

EN 659:2003+A1:2008

CE 0534

Firefighters‘ protective gloves

EN 388:2016

Mechanical risks

When gloves according to EN 659:2003 + A1:2008 are labelled as washable, it is mandatory for tests on heat and mechanical risks to be carried out following pretreatment with wash cycles. The maximum tested number of washes must be indicated in the user information, as well as on the label. Gloves which are certified without pretreatment with wash cycles must be labelled as not washable. In practice, this means that the washing symbols need to be crossed out. ESKA's aim is for fabric gloves for firefighters to maintain their mechanical and thermal maximum values after 20 washes at 60 °C.

All mechanical and thermal maximum values are achieved after pretreatment of 20 washes at 60 °C (washing process according to ISO 6330 6N+A)

TEST	REQUIREMENT	VALUES ACHIEVED IN NEW CONDITION	VALUES ACHIEVED AFTER 20 WASHES
EN 388:2016 Abrasion	min. performance level 3	performance level 4	performance level 4
EN 388:2016 Cut resistance backhand	min. performance level 2	performance level 4	performance level 4
EN 388:2016 Cut resistance palm	min. performance level 2	performance level 4	performance level 5
EN 388:2016 Tear resistance	min. performance level 3	performance level 4	performance level 4
EN 388:2016 Puncture resistance	min. performance level 3	performance level 3	performance level 3
EN 388:2016 Cut resistance TDM	-	performance level F	performance level F
EN 407:2020 Burning behaviour	min. performance level 4	performance level 4	performance level 4
EN ISO 9151 Flame resistance	min. 13 S.	16,4 S.	18,1 S.
EN ISO 6942 Resistance to heat	min. 20 S.	22,7 S.	21,9 S.
EN 702 Contact heat	min. 10 S.	16,9 S.	16,4 S.
ISO 17493 Glove heat shrinkage	≤ 5 %	≤ 0,7/ 0,4 %	≤ 0,7/ 0,4 %
EN 21420:2020 Dexterity	min. performance level 1	performance level 5	performance level 5
EN ISO 13935-2 Seam strength	min. 350 N.	520 N.	520 N.
EN 21420:2020 Time to take off the gloves	≤ 3 S.	1 S. / 2 S.	1 S. / 2 S.
EN ISO6530 Penetration by liquid chemicals	no penetration	fulfilled	fulfilled
Resistance to water penetration EN 20811			>200 kPa
Water resistance ISO 15383			waterproof

1. In the past, gloves used to be certified without going through wash cycles. Regardless of this, only the fit was assessed after washing, without any further test of the mechanical and thermal values.

2. The EN 659 standard does not fundamentally call for washing, **but gloves that are certified without pretreatment in the form of wash cycles must be labelled as not washable.** Manufacturers who have not certified their gloves after washing cannot bear liability for injuries or guarantee the performance levels after the gloves have been washed. All ESKA gloves for firefighters are certified after pretreatment of 20 washes. This is why we bear liability and guarantee not only the durability of our gloves, but also that all thermal and mechanical values will be maintained after up to 20 washes at 60 °C.

Our standard is 20 washes
To guarantee the longest possible wearing period of ESKA gloves, correct handling and care are of great importance. All ESKA fabric protective gloves for firefighters are **certified in new condition and after pre-treatment of 20 washes at 60° C** to guarantee that mechanical and thermal properties are maintained.

Proper care
All ESKA protective gloves provide information on how to wash them correctly in the form of care symbols on the labels. In a gentle wash programme, fabric gloves for firefighters can be washed at 60 °C and leather gloves for firefighters at 30 °C. Protective gloves for firefighters must be washed separately to prevent foreign materials (such as lint) from attaching to their surface. To avoid cross-contamination, for example between work clothes and sports clothes, protective gloves must always be washed separately.

Wash preparation
Before machine washing, remove snap hooks and fully close all the fasteners, in particular hook-and-loop fasteners. Failure to do so may lead to abrasion and damage to other fabrics in the washing machine.

Suitable detergent
Use phosphate-free mild detergent without fabric softener, optical brightener, stain remover and without bleach. Failure to do so may result in bleaching, fibre damage or damage to the coating. Fabric gloves with membrane must not be spun, or may only be spun gently for a short period of time.

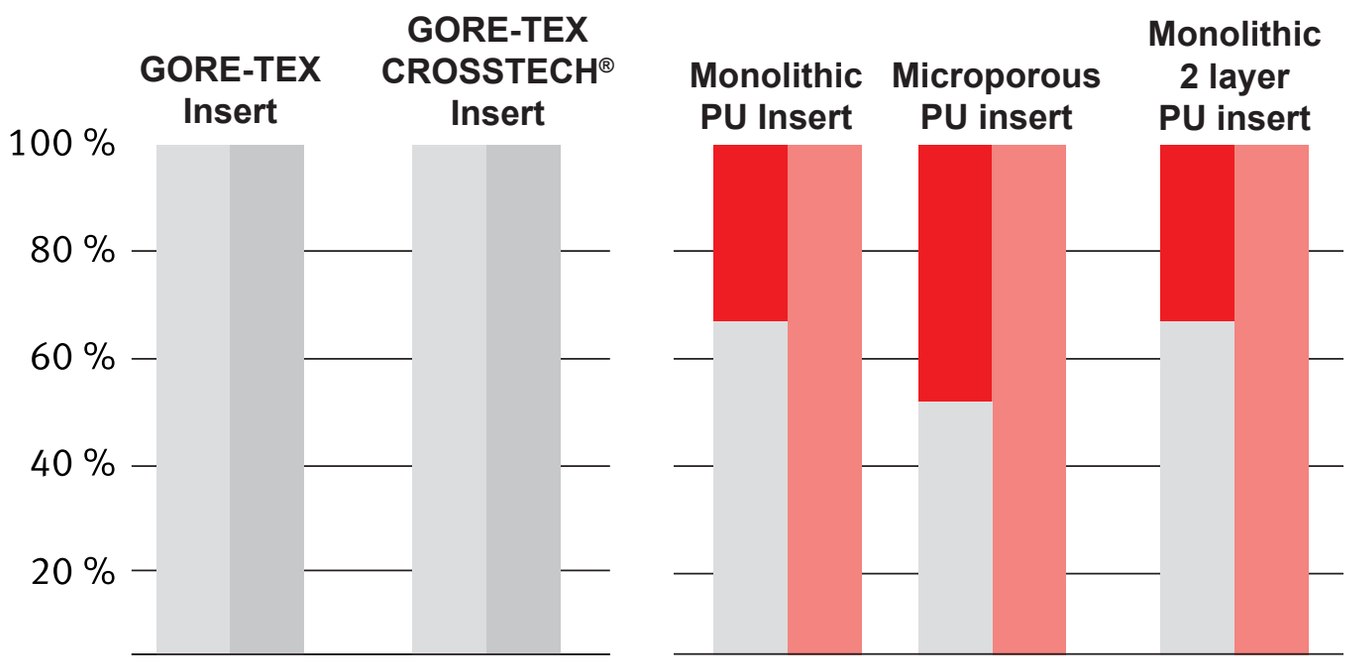
Tumble dryer or air drying
After washing, the fabric gloves for firefighters can be dried in a tumble dryer (gentle drying) or drying cabinet.
If you are not using a tumble dryer, return the gloves to their original shape by putting them on when they are still wet. Afterwards hang gloves by the fingers or leave them to air-dry on equipment designed for this purpose. Avoid heat sources such as radiators or ovens as these may damage the materials.

Cleaning with LCO_2 uses liquid carbon dioxide instead of water and does not get the gloves wet. When pressurised, the odourless gas liquefies and soaks up any dirt particles like a sponge. After a while, the carbon dioxide is released.
Now in gaseous form again, it is stored in a tank and reused in the next wash. During the conversion from a liquid to gaseous state, all dirt particles fall off. The process is similar to shaking out a dust cloth.

Decontamination and protection against particles.

Decontamination for lasting protection
During firefighting activities, toxic and carcinogenic substances may be absorbed through unprotected airways or the skin. This is why high-quality protective clothing and hygiene measures are so important. More than 90% of all infections are spread by the hands. The gloves and clothes should be packed away dust-tight immediately after firefighting activities and then cleaned professionally. Furthermore, hygienic hand cleaning with sanitiser is strictly necessary after firefighting.

Particle filter
Improperly cleaned protective clothing without an integrated liquid barrier that can also trap particles increases the risk of these solid materials getting through to the wearer's skin. The GORE-TEX and GORE CROSSTECH inserts in our gloves for firefighters act as particle filters and achieve a solid material deposition rate of up to 99% (tested according to NFPA 1971 standard, 2018 edition, Particulate Protective Hood; particle size 0.1–1.0 Qm).
Furthermore, GORE-TEX and CROSSTECH inserts remain permanently waterproof and highly breathable even after being washed many times (EN 20811, ISO 11092).



Waterproofness after washing
** Waterproofness in accordance with EN ISO 20811 (at 1 bar = 100 kPa) and washing in a normal household washing machine in accordance with EN ISO 6330 / 6N (60°C); the inserts were washed in a net bag.*
Source: Gore Glove Laboratory, 2013

CERTIFICATE

oeti

Akkreditierung Austria 0942 ISO/IEC 17065

Certificate to EU type-examination certificate
VNBP 080463
on Personal Protective Equipment

(Order VN620 120798.7)

Issued to (manufacturer)

ESKA Lederhandschuhfabrik Ges.m.b.H & Co. KG
A-4600 Wels/Thalheim; Am Thalbach 2

Based on the documents submitted and the type examination carried out this is to certify, that the new Personal Protective Equipment (PPE)

protective gloves "PHÖNIX 5F"
"8051/B PHÖNIX 5F"
"8053/B PHÖNIX E- 5F"
"8054/B PHÖNIX 5F PLUS »
"8055/B PHÖNIX E- 5F PLUS"

corresponds to the requirements of PPE Regulation (EU) 2016/425 as currently in force and complies with the applicable essential health and safety requirements. The PPE fulfils the requirements for

Protective gloves for firefighters as well Protective gloves against mechanical risks

according to EN 420:2003+A1:2009 / EN ISO 21420:2020*)
EN 388:2016 / EN 388:2016+A1:2018*) performance level 4 4 4 3 F
EN 659:2003+A1:2008

This new PPE will be assigned to **category III**

Technical properties of the PPE are given in the user information.
This type examination certificate stays valid until end of September 2025.

Dipl.-HTL-Ing. Marion Pfeiler
OETI - Institute for Ecology, Technology and Innovation; Notified Body No. NB 0534
Vienna, 10.12.2020

*) non-harmonized standard

ÖTI - Institut für Ökologie, Technik und Innovation GmbH | Spengergasse 20, 1050 Vienna, Austria
tel +43 1 5442543-0 | fax +43 1 5442543-10 | email office@oeti.at | FN 326826b | VAT No. ATU65149029
www.oeti.at

Member of TESTEX Group

USER INFORMATION PROTECTIVE GLOVES FOR FIRE – FIGHTERS

CE 0534

8051/B PHÖNIX 5F | 8053/B PHÖNIX E-5F
These gloves accord with the requirements laid down in the European PPE Regulation 2016/425 and the requirements in the European standards EN420:2003 + A1:2009/ *EN ISO 21420:2020 general requirements, EN388:2016/ EN 388:2016+A1:2018 mechanical risks and EN 659:2003+A1:2008 protective gloves for fire fighters.

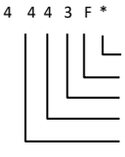
These gloves protect your hands during ordinary fire-fighting activities, including salvage and rescue operations.
In accordance with the requirements of EN 659:2003+A1:2008 the following values have been achieved:

STANDARD	REQUIRMENT	RESULTS IN NEW CONDITION	RESULTS AFTER 20 WASHING CYLCES
EN 388:2016 Abrasion	min. performance level 3	performance level 4	performance level 4
EN 388:2016 Cut resistance backhand	min. performance level 2	performance level 4	performance level 4
EN 388:2016 Cut resistance palm	min. performance level 2	performance level 4	performance level 5
EN 388:2016 Tear resistance	min. performance level 3	performance level 4	performance level 4
EN 388:2016 Puncture resistance	min. performance level 3	performance level 3	performance level 3
EN 388:2016 Cut resistance TDM	-	performance level F	performance level F
EN 407:2020 Burning behaviour	min. performance level 4	performance level 4	performance level 4
EN ISO 9151 Flame resistance palm	min. 13 S.	19,0 S.	17,5 S.
EN ISO 9151 Flame resistance backhand	min. 13 S.	16,4 S.	18,1 S.
EN ISO 6942 Resistance to heat	min. 20 S.	22,7 S.	21,9 S.
EN 702 Resistance to contact heat - dry	min. 10 S.	16,9 S.	16,4 S.
EN 702 Resistance to contact heat - wet	min. 10 S.	12,6 S.	10,7 S.
ISO 17493 Glove heat shrinkage	≤ 5 %	± 0,7/ 0,4 %	
EN 21420:2020 Dexterity	min. performance level 1	performance level 5	
EN ISO 13935-2 Seam strength	min. 350 N.	520 N.	
EN 21420:2020 Time to take of the gloves	≤ 3 s	1 S.dry/ 2 S. wet	
EN ISO 6530 Penetration of chemicals	no penetration	fulfilled	fulfilled

One can not directly apply the measured performance levels to protection levels in actual operating conditions. Thermal protection in wet gloves may be reduced considerably.

EN 388:2016 Protective gloves against mechanical risks
These gloves are intended to protect the hands against mechanical risks at the following performance levels:

4 4 4 3 F *



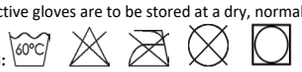
Performance level – Protection against impact EN 388:2016 fulfilled*
Performance level – Penetration Cut resistance "TDM" EN 388:2016 (lowest A, highest F)
Performance level – Penetration force EN 388:2016 (lowest 1, highest 4)
Performance level – Tear resistance EN 388:2016 (lowest 1, highest 4)
Performance level – Cut resistance EN 388:2016 (lowest 1, highest 5)
Performance level - Abrasion EN 388:2016 (lowest 1, highest 4)

*) if the protection against impact is fulfilled, then the marking "P" is mentioned, if this option is not offered then this place stay empty.
The gloves fulfil performance level 5 after inspection of dexterity (lowest performance level 1, highest performance level 5)
The performance levels refer to the entire glove including all layers.
These gloves are intended for activities which feature high cut, abrasion, tear and penetration hazards. The duration of use is particularly dependent on the respective application and the degree of stress and wear to which the gloves are exposed, but also on other criteria such as regular care and correct storage. Indicators for a possible reduction in protection performance are, amongst other things:
- Visible, severe changes to the individual product areas (e.g. abraded areas, thinning, tears, holes)
- Damaged seams (e.g. open or frayed seams).
The product should always be checked prior to use for wear, damage or other changes and replaced if necessary. There are currently no indications that the product cannot preserve its properties over many years as long as it is stored correctly (e.g. dry, dust-free, dark).

LIMITS OF USE:
Protective gloves for fire-fighters provide hand protection during fire-fighting activities, including salvage and rescue operations. In high-risk fire-fighting activities with aluminized, reflective clothing, different, special gloves are necessary (e.g. according to EN 1486).
After mechanical or thermal stress, the protective glove should be checked for damage. Damage to the surface of the gloves through abrasion, sharp items or edges, heat influence and heavy soiling, affect the gloves' protective abilities. Protective gloves with this type of or similar damage have to be disposed of.

REPAIRS:
Any repairs should not affect the performance of the gloves. Repairs may only be carried out by ESKA.
These gloves cannot protect against injection needles, or chemical or bacteriological hazards.
They can be worn over an entire working day.
CAUTION: These gloves are not to be worn for machines with moving parts as there is a risk of trapping them.

STORAGE:
The protective gloves are to be stored at a dry, normal room temperature.

CLEANING: 

max. 20 washing cycles tested

a.) Wash at 60 degrees with a mild-action detergent, do not bleach/chlorinate, do not iron, no cleaning with perchloroethylene, tumble dry possible.
b.) Do not use solvents-containing detergents or micro-emulsions, do not use softeners.
c.) Do not use stain-removers or cleaning intensifiers.

LABELLING: ESKA Lederhandschuhfabrik GmbH & Co.KG / Phönix 5F 8051/B / Size 9 / Controllno. XXXXXX/XX/X on size care label