# **User instructions**

# Maintenance Manual for Protective Gloves for Firefighters - with Membrane - Textile

#### Dear customer,

Congratulations on your purchase of Holík protective gloves.

This product complies with all requirements and standards for protective gloves for firefighters. The gloves are designed for normal and extreme firefighting interventions and for other rescue and salvation activities.

To ensure the functionality and safe use of the gloves, observe the instructions contained herein. This is not only the way to extend the service life of the gloves, but also to protect the lives of firefighters. The lining of the protective glove is in a direct contact with the user's skin, which can cause the absorption of contact (often of a carcinogenic nature) through the skin to the firefighter's body and then cause health problems.

This risk can be significantly reduced by the regular maintenance of the outer and, in particular, the inner parts of the gloves.

#### 1. Notice to Users

- Before each use of the gloves and after it, visually inspect the gloves, in particular the seams and possible tearing of the material. If you notice damage to the glove structure to the extent that they cannot provide sufficient hand protection, discard the gloves immediately. Perform this inspection by yourself.
- Remove coarse dirt after each use.
- In the event of chemical contamination (e.g. spillage of petrol or diesel), contact a specialist company which will ensure the cleaning of the gloves, or discard the gloves immediately.
- When washing, never use fabric softeners, chlorine-based agents, optical bleaches or powder washing detergents or alkaline additives intended for household washing.
- Before washing, close any velcro fasteners and remove any carabiners.
- When working with washing and cleaning detergents, observe safety data sheets and use protective gloves and goggles.

# 2. Procedures

# 2.1. Machine Wash

#### **General Instructions and Information**

- Washing the gloves together with the firefighter's protective clothing is allowed, using effective liquid washing detergents with a decontamination component exclusively intended for this purpose.
- To prevent discoloration of the gloves when washing, it is advisable to wash color models separately.
- Make sure to wash and rinse both the outer and the inner structures of the glove.

# **Tips for Efficient Washing**

- Put a floorball ball into each glove. The ball ensures thorough washing and rinsing of the inner structure of the glove.
- When washing, use high levels of water. This is to avoid strong mechanical abrasion of the outer fabric.

# Washing-Machine Load

- Observe the correct load, i.e. 30-60 % of the useful washing-machine load.
- If the washing machine is not loaded up to 30 % of volume for example you wash only 1 pair of gloves, insert accompanying textiles into the washing machine.
- If you start the washing machine, which is overfilled (> 60 %) or which does not meet the requirement for the minimum load (< 30 %), the result of washing will be negatively affected.

# Examples of Loading the Washing Machine with a Drum Capacity of 6 kg of Laundry

- Maximum load:
  - up to 10 pairs of Holík gloves
  - 1-3 pairs of Holík gloves + 1 part of firefighter's protective clothing.

Minimum load:

- 1 pair of Holík gloves + accompanying textiles
- Maximum allowable washing-machine load is 3.5 kg of laundry.
- 1 washing-machine load of approx. 2-3.5 kg = 30-60% of optimum useful load.

#### Washing Temperature

- Normally wash at 40 °C, short program. Fill the machine with water so that the water is visible at the bottom edge of the load window.
- Wash at 60 °C if you need to disinfect the gloves or if the gloves are extremely soiled.

# Dosage

- Dosage of washing gel Holík per 5 kg of laundry is 80-120 ml. **Rinsing, Spinning**
- Gloves in particular the inner part shall be rinsed so that there are no detergent residues inside the lining. 3 cycles of rinsing, each lasting 4-5 min., are recommended.
- Drain by spinning at maximum of 800 rpm.

# End of the Washing Process

• Remove the floorball ball from the glove. Insert your hand into the glove to shape the glove.

# 2.2. Disinfection

- If there is a high risk of infection, add disinfectant to the washing detergent and proceed according to the instructions of the manufacturer of the washing detergent.
- Then wash as detailed in 2.1.

# 2.3. Drying

- Dry the gloves vertically, with the fingers up, on glove and footwear dryers, at a circulating-air temperature of max. 60 °C.
- If the dryer cannot be used, dry the gloves vertically, with the fingers up, in a room at a uniform warm-air flow.
- After drying, insert your hand into the glove again and shape the glove.
- Do not dry the gloves in direct sunlight or place them directly on heat sources.

- Do not use a dryer.
- Never accelerate drying.

#### 2.4. Impregnation

- Fluorocarbon-based impregnation adds water-repellent, oil-repellent and anti-dirt properties of the face part of the gloves.
- Impregnate the outer part of the glove structure. Use cross spraying. Apply two layers of fluorocarbon spray to the dry face of the glove. Brush the spray lightly, using a soft brush and allow to dry for about 12 hours.

Notice

- It is not recommended that you apply fluorocarbon from a water bath to impregnate the gloves because there is a risk of membrane clogging and change to the properties of the lining.
- Spray shall be applied in a well-ventilated room.

#### 3. Storage

- The gloves shall be kept and stored exclusively in the dry, clean, dark and ventilated environment and at a room temperature.
- Moisture, dirt, mold or any other factors significantly reduce the protection level and user comfort.

#### 4. Disposal

- At the end of their life, the gloves become waste.
- The gloves contaminated with environmentally hazardous substances shall be disposed of as hazardous waste.
- Discarded gloves shall be disposed of in accordance with local regulations.

#### 5. Related Documents

- European Parliament and Council (EU) regulation No. 2016/425
- Link to the testing laboratory and certification authority: www.itczlin.cz
- Link to the declaration of conformity: www.holik-international.cz

Improper maintenance can irreversibly damage the gloves! No glove can provide 100% protection. Be careful with all activities!