

Instructions for use

protective garment for firefighters

GoodPRO FR4 FireWarrior

PPE III. category

Manufacturer: GoodPRO, s.r.o., Dukelská 1247, 334 01 Přeštice, Czech Republic, www.goodpro.cz

Material:

Outershell: 69% meta-aramid, 30% para-aramid, 1% antistat, weight 225 g/m²

Isolation: 40% Melamin, 60% aramid, weight 100 g/m²

Mois.barr. / Lining: 80% aramid, 20% viscose FR + 45% MAC, 20% aramid, 35% viscose FR + laminated membrane ePTFE DUO, weight 190 g/m²

Description:

Three- layer garment for firefighters. The fabric has a special treatment against chemical splashes as well as water repellent coating. The suit provides optimal thermoregulation and protection properties as well as a high level of comfort. Inspect the garment after each use.

FN 469:

The garment provides a high level of protection only in case it is complete (jacket and trousers), properly worn and fastened. The garment protects both upper and lower part of the body including the neck, the arms (to the wrists) and legs (to the ankles). The garment does not protect other parts of the body and it is necessary to combine it with other protective equipment to get a full protection. Restore the FC treatment after approximately 20 washing cycles, use for example HYDROB FC detergent according to its user instructions. In case of an accidental splash by chemicals and/or flammable liquids, the wearer should take off the garment immediately, clean it and, if necessary, discard a damaged garment. Moisture or wetting inside or outside of the clothing will have an influence on the performance of the garment, which is different from performance in a dry condition. Inspect the garment after each use.

EN 1149-5:

A person, who is wearing an electrostatic dissipative protective clothing, has to be well-grounded. Resistance between user's skin and ground, must be smaller than 108 Ω, for example, by wearing suitable footwear on floors which distract an electrostatic charge or on conductive floors. The electrostatic dissipative protective clothing must be well-fastened. Do not take off the garment near flammable or explosive atmosphere or during a manipulation with flammable or explosive materials. The electrostatic dissipative protective clothing is intended for use in zones no. 1, 2, 20, 21 and 22 (EN 60079-10-1[7] a EN 60079-10-2 [8]), in which an ignition energy of an explosive atmosphere is not smaller than 0,016 mJ. Electrostatic dissipative protection garment must not be used in oxygen enriched atmosphere or in zone no. 0 (EN 60079-10-1 [7]), without previous approval of a responsible safety technician. A scattering function efficiency of the electrostatic dissipative protective clothing can be influenced by detrition and disruption, washing and eventual pollution. During use (including any movements such as bending) the electrostatic dissipative protective clothing must permanently cover all materials which do not have such protective properties.

Use:

Protective garment for firefighters GoodPRO FR4 FireWarrior is designed for firefighting and rescue in the indoor areas.

Caution:

To ensure the greatest possible protection and to maintain its protective properties, the personal protective garment must be worn in compliance with the manufacturer's instructions, must be always complete and well-fastened (all zippers and Velcro closures). In case of an alternate design of the garment FR4 FireWarrior with integrated personal protective equipment against falls from a height, any such integrated equipment must comply with all requirements of EN 358 and EN 469. In case of an alternate design of the garment with integrated drag rescue device (DRD), such device must comply with all requirements of EN 469.

EN 469:2020	EN 469:2020	Requirements	Evaluation
	Heat transfer – flame	$HTI_{24} \ge 13,0 / HTI_{24} - HTI_{12} \ge 4,0$	level 2, X2
	Heat transfer – radiation	$RHTI_{24} \ge 18,0 / RHTI_{24} - RHTI_{12} \ge 4,0$	level 2, X2
	Resistance to water penetration	≥ 20 kPa	level 2, Y2
	Water vapour resistance	Ret: ≤ 15 m ² .Pa.W ⁻¹	level 2, Z2
EN 1149-5:2018	EN 343:2019	Requirements	Evaluation
<u></u>	Resistance to water penetration	WP: ≥ 20 000 kPa	level 4
	Water vapour resistance	Ret: 15 - 25 m ² .Pa.W ⁻¹	level 4
EN 343:2019	EN 1149-5:2018	Requirements	Evaluation
EN 61482-2:2020	Half decay time – Method 2	T ₅₀ < 4 , S > 0,2	met
	EN 61482-2:2020	Requirements	Evaluation
	Zkratový proud	7 kA	APC2

Maintenance:

Before washing, zip up the garment, fasten all Velcro fasteners, take off the suspenders, take out the knee pads and empty the pockets. Wash the garment separately. Use liquid detergents without bleaches and fabric softeners, pH of the washing bath must not be higher than 9. Before washing fold the garment along its vertical axis including sleeves. Do not exceed capacity of the washing machine - the washing drum should be filled optimally just to 50 % of its volume. Wash with higher water content. We recommend to wash regularly only at temperature of 40°C. For more thorough cleaning, repeat the washing in the same way but turn the garment inside out before the second washing. After the washing, rinse and spin at lower speed - max. 800 rpm. We recommend free drying in a warm room, in a tumble dryer or in a drum dryer at a lower temperature of max. 60°C. Dry the garment in the dryer in 2 cycles - the first cycle turned inside (lining) out – the second cycle buttoned with the front side out - max. at 60°C - max. 2x20 minutes. Restore the FC treatment after approximately 25 washing cycles, for example, by HYDROB FC detergent according to its user instructions. Over-drying of the garment during high temperatures can lead to its disproportionate mechanical wear-out and even to an excessive shrinkage. Too often repeated garment re-impregnation is not effective. In case of ironing - max. temperature of the ironing plate is 110°C. Always iron outside the reflective stripes. We recommend keeping a reliable evidence of the suit maintenance.

Storage:

Store in dry and well-ventilated areas away from direct sunlight and UV rays. Protect from any damage.

Notes:

Keep the garment clean otherwise it can lead to degradation of its properties. Inspect after each use. To ensure the greatest possible protection do not make any alternations to the garment and/or its design. The garment keeps its protective properties only in the environment with standard volume of oxygen. To maintain the protective properties of the garment it always has to be worn complete. Inspect and maintain the garment regularly, including FC treatment. Manufacturer does not warrant nor shall manufacturer be liable, or in any way responsible, for damages to a product caused by abuse (including, but not limited to, improper use, lack of reasonable care and maintenance and/or any alteration). In case of any questions, please contact the manufacturer – info@goodpro.cz.