



Hepta[®] Inherent 270

Hepta[®] Inherent 270 is exclusively developed for ROOTS with a singular purpose: to enable professionals to do their most demanding work without compromise.

Discover more



Introducing the award winning ROOTS Hepta® Inherent 270



Hepta® 270 was developed with a singular purpose: to enable professionals to do their most demanding work without compromise.

- ✓ Inherent flame retardant protection.
- ✓ Certified for 100 wash cycles.
- ✓ Extremely visible. RIS-3279-TOM certified.
- ✓ Incredibly lightweight. Merely 270 g/m².
- ✓ Highly breathable for extra comfort.

7 fibres. 7 safety standards.

Designed to push the limits for demanding flame retardant and arc flash protective garments. It includes 7 different fibres and certifies to 7 different safety standards. Hence, Hepta®, Greek for 7, serves its name purpose.

When exposed to excessive heat and flames, the fabric creates a 'blister'—similar to the human skin. Except that this blister is created on the inside of the fabric forming a protective shield.

Hepta® provides outstanding welding performance, it is certified as a Class 2 protective fabric. That's truly remarkable for an inherent flame retardant fabric at 270 g/m².

The fabric also features exceptional tear, tensile and abrasion strength. It scored a whopping 25.000 T on the Martindale test.

Fabric sample to be pasted here.

Fabric information

Fabric composition

Hepta® uses only high-performance fibres to deliver its protection level. It includes 7 different fibres in total.

Polyester	34%
Lenzing FR®	25%
Kermel®	19%
Modacryl	13%
Para-aramid	5%
Polyamide	3%
Carbon	1%

Fabric characteristics

Fabric type:	Inherent Flame Retardant
Fabric weight:	270 g/m ²
Shrinkage:	<3%
UPF rating:	50+

Available colours

■ Hi-Vis Orange ■ Hi-Vis Yellow ■ Hi-Vis Red

Fabric features

Inherent FR	High-visibility	High strength Martindale 20.000 T	Lightweight 270 g/m ²
Rail certified RIS-3279-TOM	Breathability Extra wearer comfort	Great longevity Lasts 100 wash cycles	UV-Protection UPF Rating 50+

Available styles

RO27095HV - Coveralls
RO27190HV - Jackets
RO27295HV - Trousers

Available size range

Ladies
Men's

Laundry procedures

ISO 6330 Domestic laundry (60°C)	ISO 15797 Industrial laundry (75°C)

Additional certification



There's more to it!
Discover all fabric characteristics.

Numbers don't lie. Check the scoreboard.

EN ISO 20471:2013 (100 washing cycles)	EN 1149-5	EN ISO 11611 A1 Class 2 (A1=100 washing cycles)	RIS-3279-TOM Issue 1 2016 (100 washing cycles)
EN ISO 11612 A1 B1 C1 D0 E0 F1 (A1=100 washing cycles)	IEC 61482-2 Class 1 (4 kA) / ATPV 8.1 cal/cm ²	EN 13034:2005 Type 6	

Hepta® 270

PROTECTION LEVEL:
ARC 2
8.1 cal/m²

Above shown is the ATPV value.
Used fabric: Hepta® 270

To offer better protection a layered combination of specialised Arc Flash protective garments can be worn to boost the overall protection level. The air gap between each layer of fabric is causing this result because it acts as an insulator. Therefore, wearing a multi-layered system yields better chances of surviving an electric arc incident.

Discover more on: www.roots-original.com/atpv-ratings

Hepta® and the Environment

We design our products to be safe and long-lasting. When products are used longer, fewer resources are extracted from the earth, reduces your ecological footprint and positively impact your cost of ownership too. Hence, we pushed the Hepta® 270 fabric to be certified for 100 wash cycles. That's unparalleled.

102 L water saved (per kgs)	1,466.7 KG CO ₂ -emissions reduced (per kgs)	95% fewer chemicals used (per kgs)	100 cycles certified for 100 laundry cycles

It goes without saying that we take incredible responsibility for our products throughout their life cycles. We focus on safety and our impact on the environment. The Hepta® 270 fabric is produced under the OEKO-TEX® STeP label. Which means the entire production from fibre to weaving/knitting is executed sustainably. We are proud to report that Hepta® is produced colourants-free, FR-finishing-free saves 102 litres of water (per kgs) compared to cotton treated, and uses 346,8 litres of chemicals (per kgs) less than cotton treated.





Contact information

*As specialists in Flame Retardant & Arc Flash protective workwear
we love to help make a complicated topic easy to comprehend.*

Contact us, we'd love to help:

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