



Prod. Ref. 22120-000
Safety cat. S3 CI SRC
Range of sizes 40 - 48 (6,5 - 13)
Weight (sz. 8) 765 g
Shape C
Width 11

Description: Black water repellent printed leather ranger boot, ecological fur lining, highly insulating, antistatic, anti-shock, slipping resistant, non metallic **APT Plate** midsole **Zero Perforation**.

Plus: **AIR** footbed, made of EVA and fabric, antistatic, anatomic, holed. It guarantees high stability thanks to its different kinds of thickness in the plantar area. Arch support made of polycarbonate and fibreglass conveniently placed between heel and sole, which provides support and protection of the plantar arch, thus preventing harmful bendings. Bellows tongue. Padded collar. Perfumed sole. **Polyurethane toe cap protection**.

Suggested uses: Construction, maintenance, industries.

Care and maintenance: Clean after each use and dry off away from direct heat; treat the leather with a suitable shoe-polish. Avoid contact with aggressive chemicals or extreme temperature. Avoid immersion in sea water, lime water or cement mixed with water.

MATERIALS / ACCESSORIES

SAFETY TECHNICAL SPECIFICATIONS

		Clause EN ISO 20345:2011	Description	Unit	Cofra result	Requirement
Complete shoe	Toe cap: steel made, varnished with epoxy resin, impact resistant until 200 J and compression resistant until 1500 kg	5.3.2.3	Shock resistance (clearance after shock)	mm	14	≥ 14
		5.3.2.4	Compression resistance (clearance after compression)	mm	14,5	≥ 14
		6.2.1	Penetration resistance	N	To 1100 N	≥ 1100
	Anti perforation midsole: in multi-layers highly tensile fabric, penetration resistant, Zero Perforation				No Perforation	
		6.2.2.2	Electric resistance			
			- wet	MΩ	123	≥ 0.1
			- dry	MΩ	336	≤ 1000
	Cold insulation	6.2.3.2	Cold insulation (temp. decrease after 30' C at -17 °C)	°C	6	≤ 10
	Energy absorption system: polyurethane low density and heel profile	6.2.4	Shock absorption	J	27	≥ 20
	Upper Black water repellent printed leather thickness 1,6/1,8 mm	5.4.6	Water vapour permeability	mg/cmq h	> 2,4	≥ 0,8
			Permeability coefficient	mg/cmq	> 26,3	> 15
		6.3.1	Water absorption		14%	≤ 30%
			Water penetration		0,0 g	≤ 0,2 g
Lining	Ecological fur , highly insulating, breathable, abrasion resistant, colour beige thickness 1,2 mm	5.5.3	Water vapour permeability	mg/cmq h	> 5,9	≥ 2
			Permeability coefficient	mg/cmq	> 47,4	≥ 20
Sole	Antistatic dual-density polyurethane directly injected in the upper: Outsole: black, high density, slipping resistant, abrasion resistant and hydrocarbons resistant,	5.8.3	Abrasion resistance (lost volume)	mm³	53	≤ 150
		5.8.4	Flexing resistance (cut increase)	mm	1	≤ 4
		5.8.6	Interlayer bond strength	N/mm	> 5	≥ 4
	Midsole: black, low density, comfortable and anti-shock	6.4.2	Hydrocarbons resistance (ΔV = volume increase)	%	+ 0,2	≤ 12
	Adherence coefficient of the sole	5.3.5	SRA : ceramic + detergent solution – flat		0,42	≥ 0,32
			SRA : ceramic + detergent solution – heel (contact angle 7°)		0,34	≥ 0,28
			SRB : steel + glycerol – flat		0,20	≥ 0,18
			SRB : steel + glycerol – heel (contact angle 7°)		0,14	≥ 0,13