



Prod. Ref.	37020-N00
Safety cat.	S7S HI CI HRO LG SC FO SR
Range of sizes	38 - 48 (5 - 13)
Weight (sz. 8)	645 g
Shape	B
Widht (5 - 6)	10
Widht (6,5 - 13)	11

Description: Black/grey **TECHSHELL**, innovative, very tough, abrasion resistant, water repellent and breathable fabric and water repellent Nubuck ankle boot, **SANY-DRY**[®] lining, antistatic, anti-shock, slipping resistant, non metallic **APT PLUS** midsole **Zero Perforation**

Plus: **METAL FREE. FOOT-PAD** footbed, extremely soft and comfortable footbed. Thanks to the very low density polyurethane, the footbed is self-molding granting a right distribution of the body weight and providing an immediate feeling of comfort. High shock absorption is provided from highly resilient material and a perfect cushion in the central area of the heel. **ANTI TORSION 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 and/or unwilling torsion. Outsole resistant to +300°C (1 minute contact). Footwear equipped with a particularly abrasion-resistant material on the toe area (**SC**). Sole design especially conceived for safer standing on ladder rungs (**LG**). **Abrasion resistant TPU toe cap protection. Sealed seams**

Suggested uses: Construction, maintenance, industries

Care and maintenance: Clean after each use and dry off away from direct heat. 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 20345:2022	Description	Unit	Cofra result	Requirement
Complete shoe	Water resistance	5.15.1	Water resistance (area of water penetration after 1000 paces in a surface flooded with water)	cm ²	≤ 3	≤ 3
	Toe cap: non metallic FIBERGLASS toe cap, impact resistant until 200 J and compression resistant until 1500 kg	5.3.2.6	Shock resistance (clearance after shock)	mm	15	≥ 14
		5.3.2.7	Compression resistance (clearance after compression)	mm	16	≥ 14
	Anti perforation midsole: in multi-layers highly tensile fabric, penetration resistant, Zero Perforation	6.2.1	Penetration resistance (PS requirement with Ø 3,0 mm nail)	N	To 1100 N No perforation	≥ 1100
	Antistatic shoe: the bottom is fit for the dissipation of electrostatic charges	6.2.2.2	Electric resistance			
			- wet	MΩ	93,41	≥ 0.1
		- dry	MΩ	298	≤ 1000	
Heat insulation	6.2.3.1	Heat insulation (temp. increase after 30' at 150 °C)	°C	7	≤ 22	
Cold insulation	6.2.3.2	Cold insulation (temp. decrease after 30' C at -17 °C)	°C	5,5	≤ 10	
Energy absorption system	6.2.4	Shock absorption	J	30	≥ 20	
Upper	TECHSHELL , innovative, very tough, abrasion resistant, water repellent and breathable fabric, colour black/grey	5.4.6	Water vapour permeability	mg/cmq h	> 5	≥ 0,8
			Permeability coefficient	mg/cmq	> 41.5	≥ 15
		6.3	Water absorption		13,37%	≤ 30%
Upper	Water repellent nubuck, colour black thickness 1,8/2,0 mm		Water penetration		0,0 g	≤ 0,2 g
		5.4.6	Water vapour permeability	mg/cmq h	> 2,5	≥ 0,8
			Permeability coefficient	mg/cmq	> 26,1	≥ 15
Vamp	Felt, breathable, colour dark grey thickness 1,2 mm	6.3	Water absorption		20%	≤ 30%
			Water penetration		0,0 g	≤ 0,2 g
lining	Felt, breathable, colour dark grey thickness 1,2 mm	5.5.4	Water vapour permeability	mg/cmq h	> 5	≥ 2
			Permeability coefficient	mg/cmq	> 41,9	≥ 20
Quarter	SANY-DRY [®] , breathable, abrasion resistant, colour fluo yellow	5.5.4	Water vapour permeability	mg/cmq h	> 64,4	≥ 2

lining	thickness 1,2 mm		Permeability coefficient	mg/cmq	> 515,4	≥ 20
Sole	Polyurethane/Nitrile rubber, antistatic, directly injected in the upper:	5.8.4	Abrasion resistance (lost volume)	mm ³	112	≤ 150
	Outsole: black nitrile rubber, slipping resistant, abrasion resistant, hydrocarbons resistant and heat resistant.	5.8.5	Flexing resistance (cut increase)	mm	2	≤ 4
	Midsole: dark grey polyurethane low density, comfortable and anti-shock	5.8.7	Interlayer bond strength	N/m	4,2	≥ 3
		6.4.4	Hot resistance (300 °C)	----		any melting
		6.4.2	Hydrocarbons resistance (ΔV = volume increase)	%	10	≤ 12
	Adherence coefficient of the sole (Slip resistance)	5.3.5.2	ceramic + detergent solution – forepart (contact angle 7°)		0,40	≥ 0,36
			ceramic + detergent solution – heel (contact angle 7°)		0,35	≥ 0,31
		6.2.10	SR : ceramic + glycerol – forepart (contact angle 7°)		0,27	≥ 0,22
			SR : ceramic + glycerol – heel (contact angle 7°)		0,32	≥ 0,19