



Prod. Ref.	78450-002
Safety cat.	S1 P SRC
Range of sizes	35 - 48 (2 - 13)
Weight (sz. 8)	515 g
Shape	A
Width	11

Description: Black highly breathable **BREATHEX** fabric with 3D texture and **MICROTECH** shoe, **SANY-DRY**[®] lining, antistatic, anti-shock, slipping resistant, non metallic **APT Plate** midsole **Zero Perforation**.

Plus: **COFRA SOFT** footbed, made of scented polyurethane, holed, antistatic, anatomic, soft and comfortable; the shape of the bottom part guarantees impact energy absorption (shock absorber) and high grip; the upper part absorbs moisture and keeps the foot dry. Perfumed sole. Leather toe cap protection.

Suggested uses: Warehouses , transportation sector, 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: ALUMINIUM made, ultra light, impact resistant until 200 J and compression resistant until 1500 kg	5.3.2.3	Shock resistance (clearance after shock)	mm	15,5	≥ 14
		5.3.2.4	Compression resistance (clearance after compression)	mm	15	≥ 14
	Anti perforation midsole: in multi-layers highly tensile fabric, penetration resistant, Zero Perforation	6.2.1	Penetration resistance	N	To 1100 N	≥ 1100
	Antistatic shoe: the bottom is fit for the dissipation of electrostatic charges	6.2.2.2	Electric resistance			
			- wet	MΩ	388	≥ 0.1
			- dry	MΩ	706	≤ 1000
Upper	Energy absorption system BREATHEX , 3D texture, highly breathable, abrasion resistant, colour black	6.2.4	Shock absorption	J	28	≥ 20
		5.4.6	Water vapour permeability	mg/cmq h	> 8,8	≥ 0,8
			Permeability coefficient	mg/cmq	> 72,1	> 20
		5.4.3	Tear resistance	N	88,4	≥ 60
			Abrasion resistance	Cycle	> 100.000	
Upper	Black breathable MICROTECH thickness 1,8 mm	5.4.6	Water vapour permeability	mg/cmq h	> 1	≥ 0,8
			Permeability coefficient	mg/cmq	> 15,3	> 15
Vamp	Textile, breathable, abrasion resistant, colour black	5.5.3	Water vapour permeability	mg/cmq h	> 6,3	≥ 2
lining	Thickness 1,2 mm		Permeability coefficient	mg/cmq	> 51,1	≥ 20
Quarter	SANY-DRY [®] , breathable, antibacterial, abrasion resistant, colour black	5.5.3	Water vapour permeability	mg/cmq h	> 10,3	≥ 2
			Permeability coefficient	mg/cmq	> 82,8	≥ 20
lining	thickness 1,2 mm	5.8.3	Abrasion resistance (lost volume)	mm ³	37	≤ 150
		5.8.4	Flexing resistance (cut increase)	mm	1	≤ 4
Sole	Antistatic Polyurethane/TPU directly injected in the upper: Outsole: Ice TPU, slipping resistant, abrasion resistant and hydrocarbons resistant Midsole: Black polyurethane, low density, comfortable and anti-shock.	5.8.5	Interlayer bond strength	N/mm	> 5	≥ 4
		6.4.2	Hydrocarbons resistance (ΔV = volume increase)	%	-0,6	≤ 12
	Adherence coefficient of the sole	5.3.5	SRA : ceramic + detergent solution – flat		0,60	≥ 0,32
SRA : ceramic + detergent solution – heel (contact angle 7°)				0,52	≥ 0,28	
SRB : steel + glycerol – flat				0,28	≥ 0,18	
SRB : steel + glycerol – heel (contact angle 7°)				0,19	≥ 0,13	