COFRA®
BORN TO WORK

PRODUCT SHEET

VALVE S3S FO SR

Prod. Ref.	18540-N04
Safety cat.	S3S FO SR
Range of sizes	39 - 48 (6 - 13)
Weight (sz. 8)	490 g
Shape	A
Width	11

Description: Black water repellent full grain leather shoe, **SANY-DRY®** lining, antistatic, anti-shock, slipping resistant, non metallic **APT PLUS** midsole **Zero Perforation**

Plus: 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. Perfumed sole. **TPU toe cap protection**

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

		Clause EN ISO 20345:2022
Complete shoe	**Toe cap:** **ALUMINIUM** made, ultra light, impact resistant until 200 J	5.3.2.6
	and compression resistant until 1500 kg	5.3.2.7
	Anti perforation midsole: in multi-layers highly tensile fabric, penetration resistant, **Zero Perforation**	6.2.1
	Antistatic shoe: the bottom is fit for the dissipation of electrostatic charges	6.2.2.2
	Energy absorption system	6.2.4
Upper	Black water repellent full grain leather	5.4.6
	thickness 1,8/2,0 mm	
		6.3
Vamp	Textile, breathable, abrasion resistant, colour black	5.5.4
lining	Thickness 1,2 mm	
Quarter	**SANY-DRY®**, breathable, abrasion resistant, colour black	5.5.4
lining	thickness 1,2 mm	
Sole	Antistatic Polyurethane/TPU directly injected in the upper:	5.8.4
	Outsole: Ice TPU, slipping resistant, abrasion resistant and hydrocarbons resistant.	5.8.5
	Midsole: black polyurethane, low density, comfortable and anti-shock.	5.8.7
		6.4.2
	Adherence coefficient of the sole (Slip resistance)	5.3.5.2
		6.2.10

SAFETY TECHNICAL SPECIFICATIONS

Description	Unit	Cofra result	Requirement
Shock resistance (clearance after shock)	mm	**15**	≥ 14
Compression resistance (clearance after compression)	mm	**16,5**	≥ 14
Penetration resistance	N	**To 1100 N**	≥ 1100
(**PS** requirement with Ø 3,0 mm nail)		**No perforation**	
Electric resistance			
- wet	MΩ	**269,35**	≥ 0.1
- dry	MΩ	**465,33**	≤ 1000
Shock absorption	J	**35**	≥ 20
Water vapour permeability	mg/cmq h	**> 6,4**	≥ 0,8
Permeability coefficient	mg/cmq	**> 56,7**	≥ 15
Water absorption		**13%**	≤ 30%
Water penetration		**0,0 g**	≤ 0,2 g
Water vapour permeability	mg/cmq h	**> 84,7**	≥ 2
Permeability coefficient	mg/cmq	**> 677,4**	≥ 20
Water vapour permeability	mg/cmq h	**> 64,4**	≥ 2
Permeability coefficient	mg/cmq	**> 515,4**	≥ 20
Abrasion resistance (lost volume)	mm^3	**89**	≤ 150
Flexing resistance (cut increase)	mm	**1,6**	≤ 4
Interlayer bond strength	N/mm	**3,1**	≥ 3
Hydrocarbons resistance (ΔV = volume increase)	%	**6,5**	≤ 12
ceramic + detergent solution – forepart (contact angle 7°)		**0,40**	≥ 0,36
ceramic + detergent solution – heel (contact angle 7°)		**0,33**	≥ 0,31
SR : ceramic + glycerol – forepart (contact angle 7°)		**0,26**	≥ 0,22
SR : ceramic + glycerol – heel (contact angle 7°)		**0,24**	≥ 0,19