COFRA®
BORN TO WORK

PRODUCT SHEET

WOERDEN S7S

Prod. Ref.	37100-N01
Safety cat.	S7S AN HI CI HRO LG SC FO SR
Range of sizes	38 - 48 (5 - 13)
Weight (sz. 8)	800 g
Shape	C
Widht (5 - 6)	10
Widht (6,5 - 13)	11

Description: Brown water repellent Pull-Up Nubuck rigger, **SANY-DRY®** lining, antistatic, anti-shock, slipping resistant, non metallic **APT PLUS** midsole - type **PS** with Ø 3,0 mm nail.

Plus: **METAL FREE**. Cold protection thanks to **THINSULATE™ 200g**. **COLD BARRIER** anatomic and antistatic footbed, insulating against low temperatures. The thermal comfort inside the footwear is granted thanks to the specials PU compound devised to give high insulation. **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 unwilled torsion. Sole COLD DEFENDER PU/nitrile rubber resistant up to +300 °C (1 minute contact) and to low temperatures up to -25 °C. Footwear equipped with a particularly abrasion-resistant material on the toe area (**SC**). Sole design especially conceived for safer standing on ladder rungs (**LG**). **Ankle protection against incidental impacts. TPU insert in the heel and toe areas. 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

		Clause EN ISO 20345:2022
Complete shoe	**Water resistance**	5.15.1
	Toe cap: non metallic **FIBERGLASS** toe cap, 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**	6.2.1.1.4
	Malleolus protection	6.2.7
	Antistatic shoe: the bottom is fit for the dissipation of electrostatic charges	6.2.2.2
	Heat insulation	6.2.3.1
	Cold insulation	6.2.3.2
	Energy absorption system	6.2.4
Upper	Brown water repellent Pull-Up Nubuck	5.4.6
	thickness 1,8/2,0 mm	
		6.3
Vamp	Felt, breathable, colour dark grey	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	Polyurethane/Nitrile rubber, antistatic, resistant to low temperatures, directly injected in the upper:	5.8.4

SAFETY TECHNICAL SPECIFICATIONS

Description	Unit	Cofra result	Requirement
Water resistance (area of water penetration after 1000 paces in a surface flooded with water)	cm^2	**≤ 3**	≤ 3
Shock resistance (clearance after shock)	mm	**15**	≥ 14
Compression resistance (clearance after compression)	mm	**16**	≥ 14
Penetration resistance	N	**1370**	≥ 1100
(**PS** requirement with Ø 3,0 mm nail)			
Malleolus protection (External side)			
(medium power)	kN	**6,7**	Medium ≤10
(maximum single power)	kN	**6,6**	Single ≤15
Electric resistance			
- wet	MΩ	**93.41**	≥ 0.1
- dry	MΩ	**298**	≤ 1000
Heat insulation (temp. increase after 30' at **150** °C)	°C	**9**	≤ 22
Cold insulation (temp. decrease after 30' C at -17 °C)	°C	**5**	≤ 10
Shock absorption	J	**30**	≥ 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	**> 5**	≥ 2
Permeability coefficient	mg/cmq	**> 41,9**	≥ 20
Water vapour permeability	mg/cmq h	**> 64,4**	≥ 2
Permeability coefficient	mg/cmq	**> 515,4**	≥ 20
Abrasion resistance (lost volume)	mm^3	**112**	≤ 150

Made by Technical Dept.

Outsole:	black nitrile rubber, slipping resistant, abrasion resistant, hydrocarbons resistant and heat resistant.	5.8.5	Flexing resistance (cut increase)	mm	**2**	≤ 4
Midsole:	**Cold Defender PU** resistant to -25°C, colour brown	5.8.7	Interlayer bond strength	N/m	**4,2**	≥ 3
		6.4.4	Hot resistance (300 °C)	-----	**any melting**	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