

**Prod. Ref.** 18530-N02  
**Safety cat.** S3S FO SR  
**Range of sizes** 38 - 48 (5 - 13)  
**Weight (sz. 8)** 490 g  
**Shape** A  
**Width** 11

**Description:** Black/light green **TECHSHELL**, innovative, very tough, abrasion resistant, water repellent and breathable fabric shoe, **SANY-DRY**<sup>®</sup> 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, warehouses, transportation sector, 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
<b>Complete shoe</b>	<b>Toe cap: ALUMINIUM</b> made, ultra light, impact resistant until 200 J and compression resistant until 1500 kg	5.3.2.6	Shock resistance (clearance after shock)	mm	<b>15</b>	≥ 14
		5.3.2.7	Compression resistance (clearance after compression)	mm	<b>16,5</b>	≥ 14
	<b>Anti perforation midsole:</b> in multi-layers highly tensile fabric, penetration resistant, <b>Zero Perforation</b>	6.2.1	Penetration resistance ( <b>PS</b> requirement with Ø 3,0 mm nail)	N	<b>To 1100 N</b> <b>No perforation</b>	≥ 1100
	<b>Antistatic shoe:</b> the bottom is fit for the dissipation of electrostatic charges	6.2.2.2	Electric resistance			
			- wet	MΩ	<b>269,35</b>	≥ 0.1
			- dry	MΩ	<b>465,33</b>	≤ 1000
<b>Upper</b>	<b>Energy absorption system</b> <b>TECHSHELL</b> , innovative, very tough, abrasion resistant, water repellent and breathable fabric, colour black and light green	6.2.4	Shock absorption	J	<b>35</b>	≥ 20
		5.4.6	Water vapour permeability	mg/cmq h	<b>&gt; 5</b>	≥ 0,8
			Permeability coefficient	mg/cmq	<b>&gt; 41.5</b>	≥ 15
		6.3	Water absorption		<b>13,37%</b>	≤ 30%
			Water penetration		<b>0,0 g</b>	≤ 0,2 g
		<b>5.4.3</b>	<b>Tear resistance</b>	<b>N</b>	<b>233</b>	<b>≥ 60</b>
			<b>Abrasion resistance</b>	<b>Cycle</b>	<b>&gt; 600.000</b>	
<b>Upper</b>	Black water repellent microfibre thickness 1,8 mm	5.4.6	Water vapour permeability	mg/cmq h	<b>&gt; 12,4</b>	≥ 0,8
			Permeability coefficient	mg/cmq	<b>&gt; 99,8</b>	≥ 15
		6.3	Water absorption		<b>16%</b>	≤ 30%
			Water penetration		<b>0,0 g</b>	≤ 0,2 g
<b>Vamp lining</b>	Textile, breathable, abrasion resistant, colour black Thickness 1,2 mm	5.5.4	Water vapour permeability	mg/cmq h	<b>&gt; 84,7</b>	≥ 2
			Permeability coefficient	mg/cmq	<b>&gt; 677,4</b>	≥ 20
<b>Quarter lining</b>	<b>SANY-DRY</b> <sup>®</sup> , breathable, abrasion resistant, colour light green thickness 1,2 mm	5.5.4	Water vapour permeability	mg/cmq h	<b>&gt; 64,4</b>	≥ 2
			Permeability coefficient	mg/cmq	<b>&gt; 515,4</b>	≥ 20
<b>Sole</b>	Antistatic Polyurethane/TPU directly injected in the upper: Outsole: light green TPU, slipping resistant, abrasion resistant and hydrocarbons resistant.	5.8.4	Abrasion resistance (lost volume)	mm <sup>3</sup>	<b>89</b>	≤ 150
		5.8.5	Flexing resistance (cut increase)	mm	<b>1,6</b>	≤ 4

Midssole: black polyurethane, low density, comfortable and anti-shock.  
Adherence coefficient of the sole (Slip resistance)

5.8.7	Interlayer bond strength	N/mm	<b>3,1</b>	≥ 3
6.4.2	Hydrocarbons resistance ( $\Delta V$ = volume increase)	%	<b>6,5</b>	≤ 12
5.3.5.2	ceramic + detergent solution – forepart (contact angle 7°)		<b>0,40</b>	≥ 0,36
	ceramic + detergent solution – heel (contact angle 7°)		<b>0,33</b>	≥ 0,31
6.2.10	SR : ceramic + glycerol – forepart (contact angle 7°)		<b>0,26</b>	≥ 0,22
	SR : ceramic + glycerol – heel (contact angle 7°)		<b>0,24</b>	≥ 0,19