COFRA®
BORN TO WORK

PRODUCT SHEET

AUSILIUS ESD S2 FO SR

Prod. Ref.	78700-N02
Safety cat.	S2 FO SR
Range of sizes	35 - 48 (2 - 13)
Weight (sz. 8)	450 g
Shape	A
Width	11

Description: White water repellent and breathable **NEWTECH** slip on shoe, **SANY-DRY®**, anti-shock, slipping resistant, with low electrical resistance (ESD)

Plus: High electrical conductibility. Stability of the conductive capability for extended period. **EVANIT ESD**, footbed made of EVA and nitrile special compound, with highly bearing capacity and variable thickness, **with low electric resistance**. Thermoformed, punched and coated with highly breathable fabric.. Adjusting elastic-velcro fastening. The upper is easy to clean, up to 40°C, with neutral soap and water. Perfumed sole

Suggested uses: Footwear for microelectronic industries. Recommendable in **ATEX** environments

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

Recommendation: It is always necessary to wear socks made of natural fibers i.e. wool or cotton, because they provide the best performance with electrical conductivity. Avoid introducing any foreign body between foot and footbed of the footwear (i.e. insoles or similar items not equipped by the manufacturer), as they could make void the electrical properties the footwear have been conceived for. Do not undervalue the effect of ageing and contamination of the footwear: during time their electrical resistance can be subjected to alterations. It is always important to check the electrical properties of footwear through the use of special testing devices in electrostatic protected area (EPA), according to the European standard CEI EN 61340-5-1

MATERIALS / ACCESSORIES

Complete shoe	**E.S.D. features**
	Toe cap: **ALUMINIUM** made, ultra light, impact resistant until 200 J
	and compression resistant until 1500 kg
	Energy absorption system
Upper	White water repellent and breathable **NEWTECH**
	thickness 1,8 mm
Vamp	Textile, breathable, abrasion resistant, colour white
lining	Thickness 1,2 mm
Quarter	**SANY-DRY®**, breathable, abrasion resistant, colour white
lining	thickness 1,2 mm
Insole	Conductive, absorbent, abrasion and flaking resistant
Sole	Polyurethane/TPU with low electrical resistance, directly injected in the upper:
	Outsole: white TPU, slipping resistant, abrasion resistant and hydrocarbons resistant.
	Midsole: white polyurethane, low density, comfortable and anti-shock.
	Adherence coefficient of the sole (Slip resistance)

SAFETY TECHNICAL SPECIFICATIONS

Clause EN ISO 20345:2022	Description	Unit	Cofra result	Requirement
CEI EN 61340-5-1	Electric resistance of footwear to floor	MΩ	**51,1**	< 1000
61340-5-1	Cross resistance	MΩ	**45,2**	≤ 100
61340-5-1	Charge ability	V	**45,56**	< 100
5.3.2.6	Shock resistance (clearance after shock)	mm	**17**	≥ 14
5.3.2.7	Compression resistance (clearance after compression)	mm	**20**	≥ 14
6.2.4	Shock absorption	J	**34**	≥ 20
5.4.6	Water vapour permeability	mg/cmq h	**> 1,2**	≥ 0,8
	Permeability coefficient	mg/cmq	**> 15,1**	≥ 15
6.3	Water absorption		**6%**	≤ 30%
	Water penetration		**0,0 g**	≤ 0,2 g
5.5.4	Water vapour permeability	mg/cmq h	**> 84,7**	≥ 2
	Permeability coefficient	mg/cmq	**> 677,4**	≥ 20
5.5.4	Water vapour permeability	mg/cmq h	**> 64,4**	≥ 2
	Permeability coefficient	mg/cmq	**> 515,4**	≥ 20
5.7.4.1	Abrasion resistance	cycle	**> 400**	≥ 400
5.8.4	Abrasion resistance (lost volume)	mm^3	**110**	≤ 150
5.8.5	Flexing resistance (cut increase)	mm	**2,4**	≤ 4
5.8.7	Interlayer bond strength	N/mm	**3,5**	≥ 3
6.4.2	Hydrocarbons resistance (ΔV = volume increase)	%	**2,3**	≤ 12
5.3.5.2	ceramic + detergent solution – forepart (contact angle 7°)		**0,61**	≥ 0,36
	ceramic + detergent solution – heel (contact angle 7°)		**0,48**	≥ 0,31
6.2.10	SR : ceramic + glycerol – forepart (contact angle 7°)		**0,24**	≥ 0,22
	SR : ceramic + glycerol – heel (contact angle 7°)		**0,46**	≥ 0,19

Made by Technical Dept.