COFRA®
BORN TO WORK

PRODUCT SHEET

FADE S1 P ESD SRC

Prod. Ref.	35120-002
Safety cat.	S1 P ESD SRC
Range of sizes	36 - 47 (3 - 12)
Weight (sz. 8)	515 g
Shape	A
Width	11

Description: White punched **MICROTECH** and **BREATEX** fabric with 3D texture, highly breathable sandal, textile lining, anti-shock, slipping resistant, non metallic **APT Plate** midsole **Zero Perforation,** with low electrical resistance (ESD).

Plus: High electrical conductibility. Stability of the conductive capability for extended period. **PU15 ESD**, footbed made of scented and highy shock absorbing polyurethane, thans to the 15 mm thickness in the heel area, anatomic, holed, with low electric resistance. The upper layer is made of antibacterial textile to prevent from bad odours, to absorb moisture and keep the foot dry. Perfumed sole. Adjustable velcro closure.

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

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.

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

		Clause EN ISO 20345:2011
Complete shoe	**E.S.D. features**	CEI EN 61340-5-1
		61340-4-3
	Toe cap: **ALUMINIUM** made, ultra light, impact resistant until 200 J	5.3.2.3
	and compression resistant until 1500 kg	5.3.2.4
	Anti perforation midsole: in multi-layers highly tensile fabric, penetration resistant, **Zero Perforation,** with low electric resistance	6.2.1
	Energy absorption system: polyurethane low density and heel profile	6.2.4
Upper	**MICROTECH**, breathable, colour white	5.4.6
	thickness 1,6 mm	
Vamp lining	Textile, breathable, abrasion resistant, colour white	5.5.3
	Thickness 1,2 mm	
Quarter lining	Textile, breathable, abrasion resistant, colour light blue	5.5.3
	Thickness 1,2 mm	
Sole	dual density polyurethane, with low electric resistance, directly injected in the upper:	5.8.3
	Outsole: blue, high density, slipping resistant, abrasion	5.8.4
	resistant and hydrocarbons resistant,	5.8.6
	Midsole: ivory, low density, comfortable and anti-shock	6.4.2
	Adherence coefficient of the sole	5.3.5

SAFETY TECHNICAL SPECIFICATIONS

Description	Unit	Cofra result	Requirement
Electric resistance of footwear to the ground	MΩ	**7**	0.75 - 35
Outsole superficial electric resistance	MΩ	**72**	N/A
Crosswise outsole electric resistance	MΩ	**22**	< 100
Shock resistance (clearance after shock)	mm	**14,5**	≥ 14
Compression resistance (clearance after compression)	mm	**14,5**	≥ 14
Penetration resistance	N	**To 1100 N** **No perforation**	≥ 1100
Shock absorption	J	**28**	≥ 20
Water vapour permeability	mg/cmq h	**> 2,8**	≥ 0,8
Permeability coefficient	mg/cmq	**> 25,4**	> 15
Water vapour permeability	mg/cmq h	**> 6**	≥ 2
Permeability coefficient	mg/cmq	**> 48**	≥ 20
Water vapour permeability	mg/cmq h	**> 9,8**	≥ 2
Permeability coefficient	mg/cmq	**> 78,5**	≥ 20
Abrasion resistance (lost volume)	mm^3	**59**	≤ 150
Flexing resistance (cut increase)	mm	**1**	≤ 4
Interlayer bond strength	N/mm	**> 5**	≥ 4
Hydrocarbons resistance (ΔV = volume increase)	%	**+ 0,1**	≤ 12
SRA : ceramic + detergent solution – flat		**0,55**	≥ 0,32

Made by Technical Dept.

SRA : ceramic + detergent solution – heel (contact angle 7°)	**0,36**	≥ 0,28
SRB : steel + glycerol – flat	**0,25**	≥ 0,18
SRB : steel + glycerol – heel (contact angle 7°)	**0,15**	≥ 0,13