

Prod. Ref.	10190-000
Safety cat.	S1 ESD SRC
Range of sizes	36 - 47
Weight (Sz. 8)	470 g
Shape	A
Width	11

Description: White **ECOLORICA**[®] sandal, **Sany-Dry**[®] lining, anti-shock, slipping resistant, with low electrical resistance (ESD).

Plus: Footwear completely free from metal parts. Handwash with water and neutral soap to max 40°C. **COFRA SOFT ESD**, footbed made of scented PU, anatomic, soft and comfortable with low electric resistance; the shape of the bottom part guarantees impact energy absorption (shock absorber) and high grip; the upper part absorbs moisture and keeps the foot dry. High electrical conductivity. Stability of the conductive capability for extended period. Adjustable velcro.

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

SAFETY TECHNICAL SPECIFICATIONS

		Clause EN ISO 20345:2011	Description	Unit	Cofra result	Requirement
Complete shoe	E.S.D. features	CEI EN	Electric resistance of footwear to the ground	MΩ	16	0.75 - 35
		61340-5-1	Outsole superficial electric resistance	MΩ	85	N/A
		61340-4-3	Crosswise outsole electric resistance	MΩ	35	< 100
	Toe cap: non metallic TOP RETURN toe cap, impact resistant until 200 J	5.3.2.3	Shock resistant (free high after shock)	mm	14,2	≥ 14
	and compression resistant until 1500 kg	5.3.2.4	Compression resistance (free high after compression)	mm	14	≥ 14
	Energy absorption system: polyurethane low density and heel profile	6.2.4	Shock absorption	J	> 28	≥ 20
Upper	ECOLORICA [®] , colour white thickness 1,6 mm	5.4.6	Water vapour permeability	mg/cm ² h	> 1,5	≥ 0,8
			Permeability coefficient	mg/cm ²	> 15	> 15
Quarter lining	Sany-Dry [®] , breathable, antibacterial, abrasion resistant, colour white thickness 1,2 mm	5.5.3	Water vapour permeability	mg/cm ² h	> 6,7	≥ 2
			Permeability coefficient	mg/cm ²	> 54,1	≥ 20
Insole	Conductive, absorbent, abrasion and flaking resistant	5.7.4.1	Abrasion resistance	cycle	> 400	≥ 400
Sole	Dual-density polyurethane, with low electric resistance, directly injected in the upper:	5.8.3	Abrasion resistance (lost volume)	mm ³	85	≤ 150
		5.8.4	Flexing resistance (cut increase)	mm	2,5	≤ 4
	5.8.6	Interlayer bond strength	N/mm	> 5	≥ 4	
	6.4.2	Hydrocarbons resistance (ΔV = volume increase)	%	+ 0,4	≤ 12	
	Adherence coefficient of the sole	5.3.5	SRA : ceramic + detergent solution – flat		0,40	≥ 0,32
			SRA : ceramic + detergent solution – heel (contact angle 7°)		0,38	≥ 0,28
		SRB : steel + glycerol – flat		0,18	≥ 0,18	
		SRB : steel + glycerol – heel (contact angle 7°)		0,15	≥ 0,13	

