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| Prod. Ref. | 78880-000 |
| Safety cat. | S3 ESD SRC |
| Range of sizes | 36 - 48 (3 - 13) |
| Weight (sz. 8) | 596 g |
| Shape | A |
| Width | 11 |

Description: Black water repellent leather shoe, **SANY-DRY®** lining, anti-shock, slipping resistant, non metallic **APT Plate** midsole **Zero Perforation**, with low electrical resistance (ESD)

Plus: High electrical conductivity. Stability of the conductive capability for extended period. **COFRA SOFT ESD**, footbed made of scented polyurethane, holed, anatomic, with low electric resistance, soft and comfortable; the shape of the bottom part guarantees impact energy absorption; the upper part absorbs moisture and keeps the foot dry. Perfumed sole. **TPU toe cap protection**. **Boa®** closure system allows to put on and take off the shoe easily and quickly. Made of aviation INOX steel, Boa® laces resist to the highest stress. With one single hand it is possible to set the Boa® closure system easily and adjust it to the millimetre (**Micro-adjustability - 1 click = 1 mm**)

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

SAFETY TECHNICAL SPECIFICATIONS

| | | Clause EN ISO 20345:2011 | Description | Unit | Cofra result | Requirement |
|---------------|--|--------------------------------|--|-----------------|-----------------------|-------------|
| Complete shoe | E.S.D. features | CEI EN | | | | |
| | | 61340-5-1 | Electric resistance of footwear to the ground | MΩ | 7,2 | 0.75 - 35 |
| | | 61340-4-3 | Crosswise outsole electric resistance | MΩ | 45 | < 100 |
| | | 5.3.2.3 | Shock resistance (clearance after shock) | mm | 16 | ≥ 14 |
| Upper | Toe cap: ALUMINIUM made, ultra light, impact resistant until 200 J and compression resistant until 1500 kg | 5.3.2.4 | Compression resistance (clearance after compression) | mm | 15,5 | ≥ 14 |
| | | 6.2.1 | Penetration resistance | N | To 1100 N | ≥ 1100 |
| | Anti perforation midsole: in multi-layers highly tensile fabric, penetration resistant, Zero Perforation , with low electric resistance | | | | No perforation | |
| | | 6.2.4 | Shock absorption | J | 28 | ≥ 20 |
| | Energy absorption system: polyurethane low density and heel profile | 5.4.6 | Water vapour permeability | mg/cmq h | > 1,2 | ≥ 0,8 |
| | | | Permeability coefficient | mg/cmq | > 16,3 | > 15 |
| | | 6.3.1 | Water absorption | | 13% | ≤ 30% |
| | | | Water penetration | | 0,0 g | ≤ 0,2 g |
| | Vamp | 5.5.3 | Water vapour permeability | mg/cmq h | > 6,3 | ≥ 2 |
| | | | Permeability coefficient | mg/cmq | > 51,1 | ≥ 20 |
| lining | Thickness 1,2 mm | 5.5.3 | Water vapour permeability | mg/cmq h | > 10,3 | ≥ 2 |
| | | | Permeability coefficient | mg/cmq | > 82,8 | ≥ 20 |
| | Quarter | 5.8.3 | Abrasion resistance (lost volume) | mm ³ | 35 | ≤ 150 |
| | | 5.8.4 | Flexing resistance (cut increase) | mm | 1 | ≤ 4 |

Midsole: Black polyurethane, low density, comfortable and anti-shock.

Adherence coefficient of the sole

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|-------|--|------|------|--------|
| 5.8.6 | Interlayer bond strength | N/mm | > 5 | ≥ 4 |
| 6.4.2 | Hydrocarbons resistance (ΔV = volume increase) | % | -0,6 | ≤ 12 |
| 5.3.5 | SRA : ceramic + detergent solution – flat | | 0,60 | ≥ 0,32 |
| | SRA : ceramic + detergent solution – heel (contact angle 7°) | | 0,51 | ≥ 0,28 |
| | SRB : steel + glycerol – flat | | 0,27 | ≥ 0,18 |
| | SRB : steel + glycerol – heel (contact angle 7°) | | 0,19 | ≥ 0,13 |