

Prod. Ref. 21670-000
Safety cat. F2A AN CI HI3 SRC
Range of sizes 38 - 48 (5 - 13)
Weight (sz. 8) 1360 g
Shape C
Widht 12



Description: Black full grain fireproof and water repellent leather rigger, **COFRATEX** waterproof membrane lining, antistatic, anti-shock, slipping resistant, non metallic **APT Plate** midsole **Zero Perforation**.

Plus: Chain-saw cut resistant (class.2 - chain speed = 24 m/s). Upper made of fireproof grain leather (thickness mm 2,0/2,2) treated with mineral blendings which make it water repellent and resistant to thermal shocks. After the contact with flame there is no sign of post-combustion and post-incandescence: the leather does not suffer any damages. Full **HEAT BARRIER** footbed made of soft and scented polyurethane, antistatic, anatomic, holed, insulating against high temperatures, covered with cloth. The thermal comfort inside the footwear is granted thanks to the special polyurethane compound devised to give high insulation. The thermal comfort inside the footwear is granted thanks to the special polyurethane compound devised to give high insulation. Sole fully made of Nitrile rubber resistant to +300°C (1 minute contact). Ankle protection against incidental impacts, fireproof seams, footwear with chainsaw cut protection, leather pull-on loop, side reflex bands for high visibility. Nitrile rubber toe cap protection

Suggested uses: The footwear protecting against chainsaw cuts are provided with a special protection in the forepart to avoid any serious injury to the lower arts in the event that a moving chainsaw (at high kinetic energy) gets out of hand. Footwear for fireman. Footwear for forest fire

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.



MATERIALS / ACCESSORIES

SAFETY TECHNICAL SPECIFICATIONS

| | Clause EN ISO 20345:2011 | Description | Unit | Cofra result | Requirement |
|--|--------------------------------|---|-----------------|---|----------------------------|
| Complete shoe Chain saw cut resistance, class 2 (chain speed = 24 m/s) | EN ISO 17249:2013 | Chain saw cut resistance | --- | No cut through shall occur | No cut through shall occur |
| Water resistance | 6.2.5 | Water resistance (area of water penetration after 1000 paces in a surface flooded with water) | cm ² | ≤ 3 | ≤ 3 |
| Malleolus protection (Internal side) | 6.2.7 | Malleolus protection (Internal side) (medium power) (maximum single power) | kN | 7 | Media ≤10 Singola ≤15 |
| Malleolus protection (External side) | 6.2.7 | Malleolus protection (External side) (medium power) (maximum single power) | kN | 7 | Medium ≤10 Single ≤15 |
| Toe cap: steel made, varnished with epoxy resin, impact resistant until 200 J and compression resistant until 1500 kg | 5.3.2.3 | Shock resistant (free high after shock) | mm | 15 | ≥ 14 |
| | 5.3.2.4 | Compression resistance (free high after compression) | mm | 15 | ≥ 14 |
| Anti perforation midsole: in multi-layers highly tensile fabric, penetration resistant, Zero Perforation | 6.2.1 | Penetration resistance | N | To 1100 N No perforation | ≥ 1100 |
| Antistatic shoe: the bottom is fit for the dissipation of electrostatic charges | 6.2.2.2 | Electric resistance | | | |
| | | - wet | MΩ | 636 | ≥ 0.1 |
| | | - dry | MΩ | 895 | ≤ 1000 |

| | | | | | | | |
|----------------------|--|---------|--|---|--------------------|---------------------|--------------------|
| | Heat insulation | 6.2.3.1 | Heat insulation (temp. increase after 30' at 150 °C) | °C | 15 | ≤ 22 | |
| | Cold insulation | 6.2.3.2 | Cold insulation (temp. decrease after 30' at -17 °C) | °C | 5,5 | ≤ 10 | |
| | Energy absorption system | 6.2.4 | Shock absorption | J | 42 | ≥ 20 | |
| Upper | Black fireproof and water repellent full grain leather thickness 2,0/2,2 mm | 5.4.6 | Water vapour permeability | mg/cmq h | > 2,3 | ≥ 0,8 | |
| | | | Permeability coefficient | mg/cmq | > 25,9 | > 15 | |
| | | 6.3.1 | Water absorption | | 14% | ≤ 30% | |
| | | | Water penetration | | 0,0 g | ≤ 0,2 g | |
| Lining | COFRA-TEX membrane, breathable and abrasion resistant, colour grey thickness 1.2 mm | 5.5.3 | Water vapour permeability | mg/cmq h | > 5,2 | ≥ 2 | |
| | | | Permeability coefficient | mg/cmq | > 42,4 | ≥ 20 | |
| Sole | Antistatic nitrile rubber, directly applied on the upper: colour black, slipping resistant, abrasion resistant and hydrocarbons resistant, comfortable and anti-shock | 5.8.3 | Abrasion resistance (lost volume) | mm ³ | 140 | ≤ 150 | |
| | | 5.8.4 | Flexing resistance (cut increase) | mm | 2 | ≤ 4 | |
| | | 6.4.4 | Hot resistance (300 °C) | ---- | Any melting | any melting | |
| | | 6.4.2 | Hydrocarbons resistance (ΔV = volume increase) | % | + 4,5 | ≤ 12 | |
| | | 5.3.5 | SRA : ceramic + detergent solution – flat | | 0,45 | ≥ 0,32 | |
| | | | SRA : ceramic + detergent solution – heel (contact angle 7°) | | 0,4 | ≥ 0,28 | |
| | | | SRB : steel + glycerol – flat | | 0,21 | ≥ 0,18 | |
| | | | SRB : steel + glycerol – heel (contact angle 7°) | | 0,15 | ≥ 0,13 | |
| | | | Clause EN 15090:2012 | Description | Unit | Cofra result | Requirement |
| Complete shoe | Heat Contact: HI3 | 6.3.1 | Sand bath temperature: 250°C | | | | |
| | | | - inner temperature after 10 minutes | °C | 37 | < 42 | |
| | | | - evaluation after 40 minutes | ----- | No damage | No damage | |
| Upper | Flame resisatance | 6.3.3 | No damage | | | | |
| | | | - After-glow time | s | 1 | ≤ 2 s | |
| | | | - After-flame time | s | 1 | ≤ 2 s | |
| | | | 6.3.2 | Temperature rise after 40 seconds of exposure to radiant heat | °C | 11,2 | ≤ 24°C |
| | | | | | 6.3.3 | No damage | |
| | | | - After-glow time | s | 1 | ≤ 2 s | |
| | | | - After-flame time | s | 1 | ≤ 2 s | |