COFRA®
BORN TO WORK

PRODUCT SHEET

ELECTRICAL SAFEST YELLOW

Prod. Ref.	00060-N14
Safety cat.	SB PS E CI LG FO SR
Sizes range	38 - 48 (5 - 13)
Weight (size 42)	1030 g
Shape	D
Widht	12

Description: Yellow/black polyurethane boot, water resistant, anti-shock, slipping resistant, non metallic **APT PLUS** midsole - type **PS** with Ø 3,0 mm nail, with high electrical resistance.

Plus: **100% Metal Free**. The whole boot has been designed in order not to have any metal parts; Bootleg and Outer sole are highly electric resistant. Made of innovative polyurethane compounds, with an excellent resistance to the substances which can be found on the construction sites, such as concrete, mud, limes of any sort. It also guarantees a good resistance to hydrocarbons and organic substances. Antibacterial and antifungal, it guarantees maximum hygiene over time. The good resistance to hydrolisis guarantees a steady performance over time. **Cold Defender PU** is a special compound which guarantees higher performances than the ordinary PU for mechanical resistance to low temperatures and thermal insulation. Innovative extra-light compound. It resists very well to hydrolysis, so that the boot maintains its chemical and physical performance during time. **A perfumed essence is added to the compound to prevent nasty odours**. **METATARSAL SUPPORT**, footbed made of soft and scented polyurethane, electrically insulating, anatomic, covered with cloth; it guarantees maximum comfort and shock absorption. Cold and heat insulation. Kick off lug. Also available with thermo-insulating inner lining upon request

Suggested use: Given the high electrical resistance, it is possible to use this boot as a secondary protective equipment in addition to the primary ones (obligatory) for installation of electric plants and all activities where it is important to reduce the risk of lesions for accidental contacts with hot electric wires. **Boots for electricians**

Instructions: This boot is not a primary protective equipment. It does not prevent the risk of electrical shock when working with dangerous tensions and does not insulate from high voltage. Apart from these footwear the worker must use other electrical shock protective equipment (i.e. gloves and insulating rubber carpets or alternative systems in the work place). The resistance against electric shocks fails in wet environments and when the outer surface of the sole is contaminated by chemical agents (i.e. road salt) or entrapped conductive materials (i.e. nails or metal swarf). Therefore it is necessary to check the footwear carefully. They must be replaced if damaged or too worn. The use of this shoe is absolutely not advisable in explosive stores or any place with risk of fire

Care and maintenance: **FOR A PROPER MAINTENANCE WASH THE BOOT AFTER USE.** Clean it after each use drying off in ventilated areas, away from heat sources; remove all the residuals of contaminating stuff or dust with a good shoe-brush or a duster. Wash the boots with water and soap. Do not use aggressive products (acids, benzine, solvents) which may alter quality, protection functions and life of the boot

MATERIALS / ACCESSORIES

Complete shoe	Value of electric resistance higher than that of antistatic footwear	
	Toe cap: non metallic fiber glass toe cap, impact resistant until 200 J	
	and compression resistant until 1500 kg	
	Anti perforation midsole: in multi-layers highly tensile fabric, penetration resistant, **Zero Perforation,** with high electrical resistance	
	Cold insulation	
	Energy absorption system	
Bootleg	**Cold Defender PU** resistant to -25°C, anatomic, colour yellow, **w**ith high electrical resistance	
Outer Sole	**Cold Defender PU** resistant to -25°C, colour black **w**ith high electrical resistance	

SAFETY TECHNICAL SPECIFICATIONS

Clause EN ISO 20345:2022	Description	Unit	Cofra result	requirement
	Resistance against electric shocks of the whole footwear	MΩ	**> 2000**	≥ 1000
5.3.2.6	Shock resistant (free high after shock)	mm	**19,5**	≥ 14
5.3.2.7	Compression resistance (free high after compression)	mm	**17,5**	≥ 14
6.2.1.1.4	Penetration resistance	N	**1259**	≥ 1100
	(**PS** requirement with Ø 3,0 mm nail)			
6.2.3.2	Cold insulation (temp. decrease after 30' at **-17** °C)	°C	**5,5**	≤ 10
6.2.4	Shock absorption	J	**45**	≥ 20
5.3.3	Leak proof ness	----	**Any air leak**	any air leak
5.4.4	Breaking off extension	Mpa	**1,9**	from 1,3 to 4,6
	Extension coefficient to 100%	%	**378**	≥ 250%
5.4.5	Flexing resistance	cycle	**After 150.000 no break**	After 150.000 no break
5.8.4	Abrasion resistance (lost volume)	Mm^3	**112**	≤ 250

	5.8.5	Flexing resistance (cut increase)		mm	**0,9**	≤ 4
	6.4.2	Hydrocarbons resistance (ΔV = volume increase)		%	**3,5**	≤ 12
Electric insulation of the footwear bottom in dry condition	CAN/CSA Z195-14	Test voltage 18.000 Volts Test time 1 minute		mA	**0,25**	≤ 1
Adherence coefficient of the sole (Slip resistance)	5.3.5.2	ceramic + detergent solution – forepart (contact angle 7°)			**0,50**	≥ 0,36
		ceramic + detergent solution – heel (contact angle 7°)			**0,47**	≥ 0,31
	6.2.10	SR : ceramic + glycerol – forepart (contact angle 7°)			**0,29**	≥ 0,22
		SR : ceramic + glycerol – heel (contact angle 7°)			**0,25**	≥ 0,19