

Prod. Ref.	00040-N15
Safety cat.	S5S HI CI HRO M AN CR LG FO SR
Sizes range	38 - 48
Weight (sz. 42)	1470 g
Shape	D
Width	12

Description: Black polyurethane/Nitrile Rubber boot, water resistant, antistatic, anti-shock, slipping resistant, non metallic **APT PLUS** midsole - type **PS** with Ø 3,0 mm nail.

Plus: **Metal free.** Abrasion resistant cleats 11 mm. **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.** **Cold Insulation -50°C** (the thermal comfort inside the boot stays optimal). Very good resistance to mineral oils and hydrocarbons. **COLD BARRIER** footbed made of soft and scented polyurethane, antistatic, anatomic, insulating against low temperatures. The thermal comfort inside the footwear is granted thanks to the special polyurethane compound devised to give high insulation. Fleece lined. Kick off lug. Also available with thermo-insulating inner lining or collar upon request.

Suggested uses: Boots for refineries

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, benzene, solvents) which may alter quality, protection functions and life of the boot



MATERIALS / ACCESSORIES

SAFETY TECHNICAL SPECIFICATIONS

		Clause EN ISO 20345:2022	Description	Unit	Cofra result	requirement
Complete shoe	metatarsal protection	6.2.6.2	Shock resistant (free high after shock)	mm	45	≥ 40
	Cut resistance	6.2.8.3	Cut resistance	Factor	3	≥ 2,5
	Malleolus protection (Internal side)	6.2.7	Malleolus protection (Internal side)			
			(medium power)	kN	8	Media ≤10
			(maximum single power)	kN	8,3	Singola ≤15
	Malleolus protection (External side)	6.2.7	Malleolus protection (External side)			
			(medium power)	kN	7,6	Medium ≤10
			(maximum single power)	kN	7,5	Single ≤15
Toe cap: non metallic fiber glass toe cap, impact resistant until 200 J and compression resistant until 1500 kg		5.3.2.6	Shock resistant (free high after shock)	mm	18	≥ 14
		5.3.2.7	Compression resistance (free high after compression)	mm	15,5	≥ 14
Anti perforation midsole: in multi-layers highly tensile fabric, penetration resistant, Zero Perforation		6.2.1	Penetration resistance (PS requirement with Ø 3,0 mm nail)	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	324,35	≥ 0,1	
	- dry		MΩ	629,22	≤ 1000	
Heat insulation		6.2.3.1	Heat insulation (temp. increase after 30' at 150 °C)	°C	4	≤ 22
Cold insulation		6.2.3.2	Cold insulation (temp. decrease after 30' C at -17 °C)	°C	7	≤ 10
Energy absorption system		6.2.4	Shock absorption	J	48	≥ 20
		5.3.3	Leak proof ness	----	any air leak	any air leak

Leg	Cold Defender PU , antibacterial, resistant to -25°C, anatomic, light and flexible, colour black	5.4.4	Breaking off extension	Mpa	1,6	from 1,3 to
			Extension coefficient to 100%	%	379	4,6 ≥ 250
		5.4.5	Flexing resistance	cycle	After 150.000 no break	After 150.000 no break
Insole	Cold Defender PU , antibacterial, resistant to -25°C, antishock and thermally insulating, colour black	5.8.4	Abrasion resistance (lost volume)	mm ³	80	≤ 250
Outer Sole	Nitrile rubber (HRO): hydrolysis, abrasion and slipping resistant, high grip, colour black	5.8.5	Flexing resistance (cut increase)	mm	2,1	≤ 4
		6.4.4	Hot resistance (300 °C)	----	any melting	any melting
		6.4.2	Hydrocarbons resistance (ΔV = volume increase)	%	9,5	≤ 12
	Adherence coefficient of the sole (Slip resistance)	5.3.5.2	ceramic + detergent solution – forepart (contact angle 7°)		0,40	≥ 0,36
ceramic + detergent solution – heel (contact angle 7°)				0,35	≥ 0,31	
6.2.10		SR : ceramic + glycerol – forepart (contact angle 7°)		0,25	≥ 0,22	
		SR : ceramic + glycerol – heel (contact angle 7°)		0,21	≥ 0,19	

Prod. Ref.	00040-N12
Safety cat.	S5S HI CI HRO M AN CR LG FO SR
Sizes range	38 - 48
Weight (sz. 42)	1495 g
Shape	D
Width	12

Description: Green/black polyurethane/Nitrile Rubber boot, water resistant, antistatic, anti-shock, slipping resistant, non metallic **APT PLUS** midsole - type **PS** with Ø 3,0 mm nail.

Plus: Metal free. Abrasion resistant cleats 11 mm. **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. Cold Insulation -50°C** (the thermal comfort inside the boot stays optimal). Very good resistance to mineral oils and hydrocarbons. **COLD BARRIER** footbed made of soft and scented polyurethane, antistatic, anatomic, insulating against low temperatures. The thermal comfort inside the footwear is granted thanks to the special polyurethane compound devised to give high insulation. Fleece lined. Kick off lug. Also available with thermo-insulating inner lining or collar upon request.

Suggested uses: Boots for forestry and agriculture

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

SAFETY TECHNICAL SPECIFICATIONS

		Clause EN ISO 20345:2022	Description	Unit	Cofra result	requirement
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	Anti perforation midsole: in multi-layers highly tensile fabric, penetration resistant, Zero Perforation	6.2.1	Penetration resistance (PS requirement with Ø 3,0 mm nail)	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	324,35	≥ 0.1
			- dry	MΩ	629,22	≤ 1000
	Heat insulation	6.2.3.1	Heat insulation (temp. increase after 30' at 150 °C)	°C	4	≤ 22
	Cold insulation	6.2.3.2	Cold insulation (temp. decrease after 30' C at -17 °C)	°C	7	≤ 10
	Energy absorption system	6.2.4	Shock absorption	J	48	≥ 20
		5.3.3	Leak proof ness	----	any air leak	any air leak

Leg	Cold Defender PU , antibacterial, resistant to -25°C, anatomic, light and flexible, colour green	5.4.4	Breaking off extension	Mpa	1,6	from 1,3 to
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		6.4.4	Hot resistance (300 °C)	----	any melting	any melting
		6.4.2	Hydrocarbons resistance (ΔV = volume increase)	%	9,5	≤ 12
		5.3.5.2	ceramic + detergent solution – forepart (contact angle 7°)		0,40	≥ 0,36
			ceramic + detergent solution – heel (contact angle 7°)		0,35	≥ 0,31
6.2.10	SR : ceramic + glycerol – forepart (contact angle 7°)		0,25	≥ 0,22		
	SR : ceramic + glycerol – heel (contact angle 7°)		0,21	≥ 0,19		
	Adherence coefficient of the sole (Slip resistance)					