

PRODUCT SHEET

GRUMMAN S3L FO SR

 Prod. Ref.
 18530-000

 Safety cat.
 S3L FO SR

 Range of sizes
 35 - 48 (2 - 13)

 Weight (sz. 8)
 490 g

 Shape
 A

 Width
 11

Description: Black/orange **TECHSHELL**, innovative, very tough, abrasion resistant, water repellent and breathable fabric shoe, **SANY-DRY®** lining, antistatic, anti-shock, slipping resistant, non metallic **APT Plate** midsole **Zero Perforation**

Plus: FOOT-PAD footbed, extremely soft and comfortable footbed. Thanks to the very low density polyurethane, the footbed is self-molding granting a right distribution of the body weight and providing an immediate feeling of comfort. High shock absorption is provided from highly resilient material and a perfect cushion in the central area of the heel. **Perfumed sole. TPU toe cap protection**

Suggested uses: Construction, maintenance, warehouses, transportation sector, industries

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

Clause



Cofra

MATERIALS / ACCESSORIES

SAFETY TECHNICAL SPECIFICATIONS

		EN ISO 20345:2022	Description	Unit	result	Requirement
Complete shoe	Toe cap: ALUMINIUM made, ultra light, impact resistant until 200 J	5.3.2.6	Shock resistance (clearance after shock)	mm	15	≥ 14
	and compression resistant until 1500 kg	5.3.2.7	Compression resistance (clearance after compression)	mm	18	≥ 14
	Anti perforation midsole: in multi-layers highly tensile fabric, penetration resistant, Zero Perforation	6.2.1	Penetration resistance	N	To 1100 N	≥ 1100
			(PL requirement with Ø 4,5 mm nail)		No perforation	
	Antistatic shoe: the bottom is fit for the dissipation of electrostatic charges	6.2.2.2	Electric resistance			
			- wet	$M\Omega$	79,6	≥ 0.1
			- dry	$M\Omega$	325	≤ 1000
	Energy absorption system	6.2.4	Shock absorption	J	26	≥ 20
Upper	TECHSHELL , innovative, very tough, abrasion resistant, water repellent and breathable fabric, colour black and orange	5.4.6	Water vapour permeability	mg/cmq h	> 5	≥ 0,8
			Permeability coefficient	mg/cmq	> 41.5	≥ 15
		6.3	Water absorption		13,37%	≤ 30%
			Water penetration		0,0 g	≤ 0,2 g
		5.4.3	Tear resistance	N	233	≥ 60
			Abrasion resistance	Cycle	> 600.000	
Vamp	Textile, breathable, abrasion resistant, colour black	5.5.4	Water vapour permeability	mg/cmq h	> 6,3	≥ 2
lining	Thickness 1,2 mm		Permeability coefficient	mg/cmq	> 51,1	≥ 20
Quarter	SANY-DRY®, breathable, abrasion resistant, colour black	5.5.4	Water vapour permeability	mg/cmq h	> 10,3	≥ 2
lining	thickness 1,2 mm		Permeability coefficient	mg/cmq	> 82,8	≥ 20
Sole	Antistatic Polyurethane/TPU directly injected in the upper:	5.8.4	Abrasion resistance (lost volume)	mm^3	89	≤ 150
	Outsole: orange TPU, slipping resistant, abrasion resistant and hydrocarbons resistant.	5.8.5	Flexing resistance (cut increase)	mm	1,6	≤ 4
	Midsole: black polyurethane, low density, comfortable and anti-shock.	5.8.7	Interlayer bond strength	N/mm	3,1	≥ 3
		6.4.2	Hydrocarbons resistance (ΔV = volume increase)	%	6,5	≤ 12
	Adherence coefficient of the sole (Slip resistance)	5.3.5.2	ceramic + detergent solution - forepart (contact angle 7	7°)	0,40	≥ 0,36
			ceramic + detergent solution – heel (contact angle 7°)		0,33	≥ 0,31

6.2.10 SR: ceramic + glycerol - forepart (contact angle 7°) 0,26 ≥ 0,22 0,24 ≥ 0,19

SR: ceramic + glycerol - heel (contact angle 7°)

Made by Technical Dept.