



EN ISO 20345:2022

Class: S1PS FO SR ESD
 Sizes: 34-48
 Available in stock only sizes 35-47
 Instep: 12
 Weight (±10%): **590 gr.** (*)

TECHNICAL SHEET ART. FRESH

Description: low shoe in grey suede leather with padded storm-cuff, 100% polyester lining, non-metallic HRP Insole, DYNAMIC Insole, antistatic, breathable, double density polyurethane sole, bending resistant, abrasion resistant, oil resistant, slip resistant, ESD

Plus: midsole compound particularly studied to get a soft PU density for a higher comfort

Suggested sectors of usage: Mechanical industry, Servicing, Logistics / Packaging, Professionals / Craftsmen, Cooperative society

Care and Maintenance: clean periodically the outsole and the upper with non-aggressive substances which could compromise quality, safety and durability of the shoe, do not dry close to direct heat source



Complete shoe	Norm	Description	Unit	Results	EN ISO 20345 requirements
Toe Cap: aluminum toe cap, impact resistant 200 J	5.3.2.6	Impact resistance	mm	17,5	≥ 14
	5.3.2.7	Compression resistance	mm	22	≥ 14
Midsole: non-metallic HRP Insole with high tenacity fibres multi layers, polyester composition, perforation resistant.	6.2.1	Perforation resistance (single value)	N	1.200	≥ 950
		Average value		1.330	≥ 1.100
Insole: DYNAMIC, anatomic, antistatic, antibacterial and ESD	5.7.3	Water absorption	Mg/cm ²	228	≥ 70
		Water desorption		92%	≥ 80%
ESD footwear: dissipation capacity of the electrostatic charge	EN ISO 61340-5-1	Electrical resistance for ESD footwear	Mohm	51,7	< 100
Capacity of Energy Absorption in the heel area	6.2.4	Energy absorption in the heel area	J	33	≥ 20
Upper: grey suede leather with padded stormcuff. Breathable inserts	5.4.6	Water vapour permeability	mg/cm ² · h	39,8	≥ 0,8
		Water vapour coefficient	mg/cm ²	318,7	≥ 15
	5.4.3	Tear strength	N	219	≥ 60
Vamp/Quarter Lining: honeycomb 100% finished polyester, breathable, abrasion resistant	5.5.4	Water vapour permeability	mg/cm ² · h	122,2	≥ 2
		Water vapour coefficient	mg/cm ²	977,6	≥ 20
	5.5.2	Tear strength	N	57	≥ 15
	5.5.3	Abrasion resistance (dry)	cycles	no holes	25.600
		Abrasion resistance (wet)	cycles	no holes	12.800
Sole: double density polyurethane, bending resistant, abrasion resistant, oil resistant, slip resistant, ESD, with COMFY-BOOST insert	5.8.3	Tear strength	kN/m	21,1	≥ 8
	5.8.4	Abrasion resistance (black)	mm ³	73	≤ 150
	5.8.5	Bending resistance	mm	0	≤ 4
	5.8.6	Hydrolysis	mm	0	≤ 6
	6.4.2	Hydrocarbons resistance (volume increase)	%	4,3%	≤ 12%
	6.2.10	Slip resistance on ceramic glycerine (SR)	heel forward 7°	0,22	≥ 0,19
			tip back 7°	0,25	≥ 0,22

In model FRESH and its components there is no presence of dangerous substances by Annex XVII to regulation no. 1907/2006/CE and subsequent amendments and additions.

(*) = Indicative weight that refers to ½ pair in size 42