


Name	Code
ASPHALT	A09999 S2 PS FO HRO SR

Product Range	Standard	EN ISO	Weight	Size range	Mondopoint	Packaging
	S2 PS FO HRO SR	20345:2022	750 grams (1 shoe in size 42)	38 <> 48	11	6 pairs/carton (same size)

TECHNICAL SPECIFICATIONS



SOLE

SOLE FEATURES



Non-marking shoes have flat, durable soles with no cleats and minimal texture, designed to prevent marks. They provide traction without leaving traces on surfaces like freshly laid asphalt, ideal for road construction or maintenance where surface integrity is key.



PROTECTIVE ELEMENTS

UPPER

LINING

FOOTBED



Safety toe cap made from composite material, shielding toes from impacts up to 200 Joules and compressions up to 15 kN. It is non-magnetic, non-conductive, and provides superior thermal insulation



Protective plate made from multi-layer polyester, 40% lighter than steel, yet equally resistant up to 1,100 Newtons. It is non-magnetic, insulating and hypoallergenic.



Natural leather with water-repellent, stain, abrasion, UV-resistant properties, and exceptional tensile strength.



Three-layer wear-resistant lining featuring a microchannel network for unparalleled breathability and antimicrobial properties to prevent odors and microorganism growth.



Removable insole with anti-static, antibacterial, and antifungal properties, featuring an aluminum-coated underside that guarantees exceptional thermal insulation.

EXTRA



SAFETY TECHNICAL SPECIFICATIONS

Description	Measurement Unit	Requirement	Test Result
TOE CAP: Impact resistance	mm	≥ 14	18,5
TOE CAP: Compression resistance	mm	≥ 14	22,5
ANTI-PUNCTURE PLATE: Penetration resistance	N	≥ 1.100	1400
FOOTWEAR: Antistatic properties (in wet condition)	MΩ	≥ 0,1	23,5
FOOTWEAR: Antistatic properties (in dry condition)	MΩ	≤ 1.000	353
UPPER: Water vapour permeability	mg/cm2*h	≥ 0,8	1,3
UPPER: Water vapour coefficient	mg/cm2	≥ 15	20
UPPER: Water penetration after 60 min	g	≤ 0,2	0
UPPER: Water absorption after 60 min	%	≤ 30	1,6
INTERNAL LINING: Water vapour permeability	mg/(cm2*h)	≥ 2,0	9,1
INTERNAL LINING: Water vapour coefficient	mg/cm2	≥ 20	75,8
OUTSOLE: Abrasion resistance	mm3	≤ 150	53
OUTSOLE: Energy absorption of seat region (E)	J	≥ 20	31
OUTSOLE: Flexural resistance	mm	≤ 4	0
OUTSOLE: Interlayer bond strength	N/mm	≥ 4	4,4
OUTSOLE: Resistance to fuel oil (FO)	%	≤ 12	2,6

ADDITIONAL FEATURES

Test	Measurement Unit	Requirement	Results
Electrical resistance for ESD footwear <small>Requirements IEC 61340-5-1:2016</small>	MΩ	≤ 1,00	-
Resistance to hot contact (HRO)	-	outsoles shall not melt and develop any cracks when bent	pass
Cold insulation of outsole complex (CI) 30min/-17°C <small>(temperature decrease on the upper surface of the insock)</small>	°C	≤ 10	-
Heat insulation of outsole complex (HI) 30min/150°C	°C	≤ 22	-
Water resistance (WR) <small>(Total wetted area inside the footwear)</small>	cm2	after 80 min.	-
Electric hazard resistance (EH) 18kV / 60 Hz <small>(Electric flux)</small>	MΩ	≤ 100	-

STORAGE, CARE AND MAINTENANCE

- PANDA SAFETY footwear should be stored in original packaging, storage temperature should not exceed 35°C, humidity should be less than 80% and without the influence of direct sunlight.
- Sandals, shoes and boots should be cleaned after each use; dry off the shoes, not in proximity to or in direct contact with stoves or other sources of heat.
- Carry out the periodic treatment of the uppers with suitable products containing wax, grease, silicone, etc.
- Avoid contact with aggressive chemicals and extreme temperatures.
- Verify the good state before each use.

SOLE DESIGN AND PERFORMANCE



NON-MARKING SELF-CLEANING

ENERGY ABSORPTION COEFFICIENT IN THE HEEL AREA

0	MINIMUM VALUE REQUIRED	20	TEST RESULT	39	95%
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INDUSTRIES

