
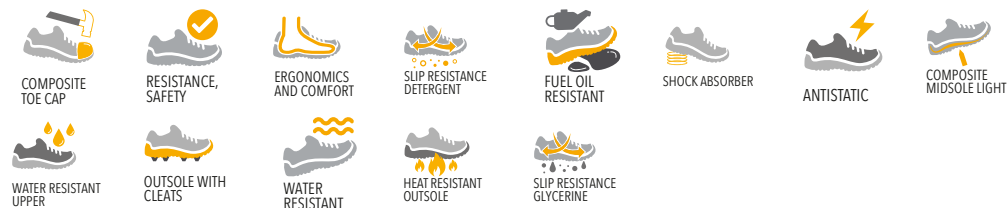


TECHNICAL DATA SHEET

Name	Code					
ASTA	09800 S3S FO HRO SC SR					

Product Range	Standard	EN ISO	Weight	Size range	Mondopoint	Packaging
	S3S FO HRO SC SR	20345:2022+A1:2024	720 grams (1 shoe in size 42)	38 <> 48	11	6 pairs/carton (same size)

TECHNICAL SPECIFICATIONS



SOLE

SOLE FEATURES



Vibram® leads in high-performance rubber soles for safety footwear, where their soles blend unique designs with cutting-edge compounds. The TC4+ compound offers unmatched grip, stability, thermal insulation, and tear resistance.



ANATOMICAL
INTERNAL PROFILE



self-cleaning



ANTI
TORSION



ARCH
SUPPORT

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.



The most durable among the full-grain leathers; it guarantees total water resistance thanks to a special tanning process.



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



Removable insole that distributes weight evenly, adapts to foot morphology and has anti-static, antibacterial, and antifungal properties. A cushioned heel insert adds comfort.

EXTRA



EXTRA-COMFORT
PADDINGS



REFLECTOR



PLR
POLYURETHANE LEATHER RESISTANCE



METAL
FREE



YKK



SAFETY TECHNICAL SPECIFICATIONS

Description	Measurement Unit	Requirement	Test Result
TOE CAP: Impact resistance	mm	≥ 14	15,5
TOE CAP: Compression resistance	mm	≥ 14	19
ANTI-PUNCTURE PLATE: Penetration resistance	N	≥ 1.100	1350
FOOTWEAR: Antistatic properties (in wet condition)	MΩ	≥ 0,1	124
FOOTWEAR: Antistatic properties (in dry condition)	MΩ	≤ 1.000	300
UPPER: Water vapour permeability	mg/cm2*h	≥ 0,8	1,5
UPPER: Water vapour coefficient	mg/cm2	≥ 15	17,5
UPPER: Water penetration after 60 min	g	≤ 0,2	0
UPPER: Water absorption after 60 min	%	≤ 30	3
INTERNAL LINING: Water vapour permeability	mg/(cm2*h)	≥ 2,0	95,1
INTERNAL LINING: Water vapour coefficient	mg/cm2	≥ 20	761,2
OUTSOLE: Abrasion resistance	mm3	≤ 150	71
OUTSOLE: Energy absorption of seat region (E)	J	≥ 20	36
OUTSOLE: Flexural resistance	mm	≤ 4	0
OUTSOLE: Interlayer bond strength	N/mm	≥ 4	4,1
OUTSOLE: Resistance to fuel oil (FO)	%	≤ 12	4

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)	-	autoles 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



TRACTION STABILITY GRIP BRAKING SELF-CLEANING LADDER GRIP



ENERGY ABSORPTION COEFFICIENT IN THE HEEL AREA				
0	MINIMUM VALUE REQUIRED	20	TEST RESULT	36
				80%

INDUSTRIES

