

# TECHNICAL DATA SHEET

Name

**PERANA S2**

Code

**34549 S2 FO SR**

Product Range



Standard

S2 FO SR

EN ISO

20345:2022

Weight

420 grams  
(1 shoe in size 42)

Size range

35 <> 48

Mondopoint

11

Packaging

10 pairs/carton  
(same size)

## TECHNICAL SPECIFICATIONS



### SOLE

### SOLE FEATURES

MICROLIGHT

ANATOMICAL  
INTERNAL PROFILE

self  
cleaning

ANTI  
TORSION

ARCH  
SUPPORT

The MICROLIGHT® soles, which combine cutting-edge compounds for both the PU foam midsole and the compact PU outsole, excel in lightness, flexibility, and elasticity, while offering exceptional stability and wear resistance.

### 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.

WATERPROOF  
MICROFIBRE

Hypoallergenic microfiber with high breathability, tear, rip, scratch, and friction resistance, plus water-repellent and stain-resistant properties.

AIRNET  
SANITIZED

Made from durable multi-layer fabric, this lining offers excellent breathability and moisture wicking. It features SANITIZED® treatment to suppress microorganism growth and prevent odours.

SANITIZED  
INSOLE

Antistatic and anti-odour removable insole with SANITIZED® technology ensuring hygiene and a fresh feeling all day.

### EXTRA

INFINITI  
INSERT

VELCRO  
CLOSURE

ULTRALIGHT  
FOOTWEAR

METAL  
FREE

100%  
SANITIZED

Washable



## SAFETY TECHNICAL SPECIFICATIONS

Description	Measurement Unit	Requirement	Test Result
<b>TOE CAP:</b> Impact resistance	mm	≥ 14	18
<b>TOE CAP:</b> Compression resistance	mm	≥ 14	19
<b>ANTI-PUNCTURE PLATE:</b> Penetration resistance	N	≥ 1.100	-
<b>FOOTWEAR:</b> Antistatic properties (in wet condition)	MΩ	≥ 0,1	4,8
<b>FOOTWEAR:</b> Antistatic properties (in dry condition)	MΩ	≤ 1.000	80
<b>UPPER:</b> Water vapour permeability	mg/cm2*h	≥ 0,8	0,9
<b>UPPER:</b> Water vapour coefficient	mg/cm2	≥ 15	15,1
<b>UPPER:</b> Water penetration after 60 min	g	≤ 0,2	0
<b>UPPER:</b> Water absorption after 60 min	%	≤ 30	2,6
<b>INTERNAL LINING:</b> Water vapour permeability	mg/(cm2*h)	≥ 2,0	130,7
<b>INTERNAL LINING:</b> Water vapour coefficient	mg/cm2	≥ 20	1045,8
<b>OUTSOLE:</b> Abrasion resistance	mm3	≤ 150	39
<b>OUTSOLE:</b> Energy absorption of seat region (E)	J	≥ 20	29
<b>OUTSOLE:</b> Flexural resistance	mm	≤ 4	0
<b>OUTSOLE:</b> Interlayer bond strength	N/mm	≥ 4	4,9
<b>OUTSOLE:</b> Resistance to fuel oil (FO)	%	≤ 12	2,1

## ADDITIONAL FEATURES

Test	Measurement Unit	Requirement	Results
<b>Electrical resistance for ESD footwear</b> <small>Requirements IEC 61340-5-1:2016</small>	mA	≤ 1,00	-
<b>Resistance to hot contact (HRO)</b>	-	outsoles shall not melt and develop any cracks when bent	-
<b>Cold insulation of outsole complex (CI) 30min/-17°C</b> <small>(temperature decrease on the upper surface of the insole)</small>	°C	≤ 10	-
<b>Heat insulation of outsole complex (HI) 30min/150°C</b>	°C	≤ 22	-
<b>Water resistance (WR)</b> <small>(Total wetted area inside the footwear)</small>	cm2	after 80 min.	-
<b>Electric hazard resistance (EH) 18kV / 60 Hz</b> <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 29 45%

## INDUSTRIES

