TECHNICAL DATA SHEET

IMPULSE grey Low ESD S1 No. 72245 Sz. 36 - 47







LABELLING ACCORDING TO STANDARD

Standard for safety footwear EN ISO 20345:2022 S1	Basic requirement for S1: **A** Antistatic shoe - **E** Energy absorption in the heel - Closed heel area
Additional requirements	**FO** FUEL RESISTANCE **SR** SLIP RESISTANCE on ceramic tile with glycerine.

FORM

Safety shoe 	Form A - in size 42, the upper height must not exceed 11.2 cm.

AREAS OF APPLICATION

Areas of application	Dry work areas Industry, storage, transport, assembly etc. (S1) Areas where there is a risk of electrostatic discharge (ESDS/ESD) E.g. airports, airplane construction, automobile manufacturing No scratches from metal parts Close to induction loops / metal detectors

FEATURES

ESD equipment	Thanks to its excellent discharge capability, the shoe is suitable for work in ESD sensitive or electrostatically protected areas (EPA). The shoes comply to the standard 61340-5-1.
Sizes (unisex model)	• Expanded size range: available in sizes 36 - 47
Certification in accordance with DGUV rule 112-191	• Certified for orthopaedic inserts

FEATURES	
Low weight	• Use of a composite toe cap and a metal-free puncture protection • Comfortable
Padded upper edge	• Excellent wearing comfort: the padded upper edge protects the Achilles tendon.
Full, padded bellows tongue	• Excellent wearing comfort: The tongue prevents pressure marks and avoids dirt from entering into the shoe.
Perforated upper	• The perforation supports an optimum air circulation inside the shoe and thus contributes to a pleasant wearing comfort.
Reflective material	• Good visibility in the dark 
Biomex Dynamics© Technology 	When looking at joints, muscles and bones, the human foot follows certain movement patterns while walking. Our Biomex Dynamics outsole supports these and enables a dynamic forward movement inside the shoe, which is identical to the congenital walking movement. Guiding element: The decoupling guide elements parallel to the S-shaped rolling line support the torsion and therefore the rolling dynamic of the front and rear foot. The midsole is heightened on the inside and thus prevents pronation (walking on the inside of the foot).
Elastic lacing system	• For an individual adjustment to the foot • With quick-locking system
No metal or leather	• Low weight • Suitable for work areas sensitive to metal • Does not trigger metal detectors • Use around induction loops is possible • Suitable for persons allergic to leather
UPPER MATERIAL	
Microfibre	• Synthetic material • Particularly soft • Retains its shape • Tear-resistant • Quick drying • Abrasion-resistant and light
LINING	
Breathable fabric lining	• Climate-regulating • Good ventilation • Skin-friendly • High absorption and emission of moisture
Heel pocket lining	• The abrasion-resistant microfibre material is particularly sturdy and provides for a pleasant wearing comfort.

TOE PROTECTION CAP

Composite toe cap



- Protection against impacts of min. 200 joules and pressure loading of min. 15 kN
- Permanent edge coverage for cushioning
- Ergonomically shaped
- Comfortable toe room
- Good coverage of the little toe area
- Low weight - weighs less than conventional steel caps
- 100% metal-free
- 100% anti-magnetic

INLAY SOLE

Semi-orthopaedic inlay sole ESD



- ESD EQUIPMENT: Protection against electrostatic discharge (ESD). The full-length, exchangeable inlay sole is conductive and designed for the use in ESD safety footwear according to the standards DIN EN ISO 20345 and DIN EN 61340-5-1.
- The sole’s footbed is tailored to the fit of the shoe as well as to the natural, intact longitudinal arch of the foot.
- The improved heel damping is kind to the entire musculoskeletal system – from foot to spinal column.
- Improvement of the shoe climate thanks to the PU foam's open cell structure. So the foot is always kept comfortably dry.
- The extreme softness of the PU foam absorbs shocks on impact and increases walking comfort.

INSOLE

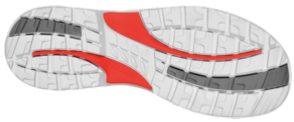
ESD soft-fleece insole

ESD equipment: Protection against electrostatic discharge (ESD), and without using additional means fulfilling a bridge function to the outsole.

- Approximately 50 % lighter than comparable soles made of natural materials
- Flexible and shape-retaining
- Good air permeability
- Excellent wear resistance
- High moisture absorption
- Quick drying (virtually overnight)

OUTSOLE

BIOMEX DYNAMICS double-density sole with profile





- S-line shaped configuration of the tread blocks, for an ergonomic foot roll
- Contrasting colours for dynamic design
- Excellent slip resistance
- Antistatic

Outsole: TPU (thermoplastic polyurethane)

- Colour: lightgrey, with coloured inserts
- Profile depth: 4.0 mm
- Particularly abrasion-resistant
- Heat-resistant to approx. 130°C
- Flexible at cold temperatures to approx. -30°C
- Oil and fuel resistant

Midsole: PU (polyurethane)

- The soft PU core provides a good impact absorption and high wearing comfort