# TECHNICAL DATA SHEET

## IMPULSE grey Easy ESD S1 No. 71245 Sz. 36 - 47







## LABELLING ACCORDING TO STANDARD

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

## FORM

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

## AREAS OF APPLICATION

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

## FEATURES

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| 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<br>• Comfortable |
| Padded upper edge | • Excellent wearing comfort: the padded upper edge protects the Achilles tendon. |
| Padded tongue | • Excellent wearing comfort: The tongue prevents pressure marks. |
| 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  |
| Hook-and-pile fastener | • Can be opened and closed easily and quickly<br>• Individually adjustable for optimal adaptation to the foot<br>• Improves the comfort and fit |
| 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.<br>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.<br>The midsole is heightened on the inside and thus prevents pronation (walking on the inside of the foot). |
| No metal or leather | • Low weight<br>• Suitable for work areas sensitive to metal<br>• Does not trigger metal detectors<br>• Use around induction loops is possible<br>• Suitable for persons allergic to leather |
| **UPPER MATERIAL** | |
| Microfibre | • Synthetic material<br>• Particularly soft<br>• Retains its shape<br>• Tear-resistant<br>• Quick drying<br>• Abrasion-resistant and light |
| **LINING** | |
| Breathable fabric lining | • Climate-regulating<br>• Good ventilation<br>• Skin-friendly<br>• 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

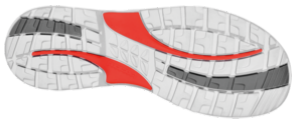
ESD soft-fleece insole

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