# TECHNICAL DATA SHEET

## ARTURO black-red Mid ESD S3S No. 765511 Sz. 38 - 48







## LABELLING ACCORDING TO STANDARD

| | |
|---|---|
| Standard for safety footwear EN ISO 20345:2022 S3S | Basic requirement for S3S:<br>**A** Antistatic shoe - **E** Energy absorption in the heel -<br>**WPA** Water penetration and absorption -<br>**S** Textile penetration protection - Closed heel area - Basic Slip resistance test on ceramic tile + NaLS (soap solution) - Profiled outsole |
| Additional requirements | **FO** FUEL RESISTANCE<br><br>**SR** SLIP RESISTANCE on ceramic tile with glycerine. |

## FORM

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| Safety laced boot  | Form B - in size 42, the upper height must be at least 11.3 cm. |

## AREAS OF APPLICATION

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| Areas of application | Areas where there is a risk of electrostatic discharge (ESDS/ESD)<br><br>E.g. track construction, difficult terrain, forklift operators / lorry drivers<br>Activities on different kinds of ground surfaces and terrains<br>Areas where there is often a risk of twisting the foot |

## FEATURES

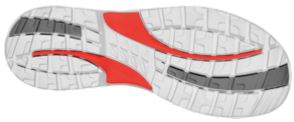
| | |
|---|---|
| ESD equipment | Thanks to its excellent discharge capability, the shoe is suitable for work in ESD sensitive or electrostatically protected areas (EPA). The shoes comply to the standard 61340-5-1. |
| Sizes (unisex model) | • Expanded size range: available in sizes 38 - 48 |
| Certification in accordance with DGUV rule 112-191 | • Certified for orthopaedic inserts |

| FEATURES | |
|---|---|
| Full, padded bellows tongue | • Excellent wearing comfort: The tongue prevents pressure marks and avoids dirt from entering into the shoe. |
| Collar padding | • Excellent wearing comfort: the ankle-wrapping, softly padded upper edge provides for stability and grip in the shoe. |
| 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. |
| Biomex Protection© plastic cuff  | The Biomex Protection© cuff surrounds heel and ankle and thereby stabilizes the ankle joint. The light and filigree cuff supports the natural rolling movement of the foot and thus protects it from injuries by twisting the ankle. The asymmetric construction of the Biomex Protection© cuff is designed in a way that it flexibly adapts to the natural human movements and can move along via two pivot points. |
| Leather-free equipment | • Suitable for persons allergic to leather |
| Winner Plus X Award | The independent jury for the Plus X Award, the Innovation Prize for Technology, Spot, and Lifestyle, grants a total of seven seals of approval to brands that offer products with a competitive edge in terms of quality and innovation. ELTEN has always seen itself as an innovative business at the cutting edge of technology. |
| **UPPER MATERIAL** | |
| Hydrophobized textile material | • Areas of application S2/S3<br>• Synthetic material<br>• Shape-retaining<br>• Tear-resistant<br>• Dries quickly<br>• Wear-resistant and light<br>• Water penetration/absorption in accordance with EN ISO 20345 S2<br>• By hydrophobation, higher resistance against water penetration and water absorption |
| Hydrophobized microfibre | • Areas of application S2/S3<br>• Synthetic material<br>• Particularly soft<br>• Retains its shape<br>• Tear-resistant<br>• Dries quickly<br>• Abrasion-resistant and light<br>• Water penetration and absorption in accordance with EN ISO 20345 S2; an improved resistance against water penetration is achieved by a special hydrophobation of the material |

| 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<br>• Permanent edge coverage for cushioning<br>• Ergonomically shaped<br>• Comfortable toe room<br>• Good coverage of the little toe area<br>• Low weight - weighs less than conventional steel caps<br>• 100% metal-free<br>• 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.<br>• The sole's footbed is tailored to the fit of the shoe as well as to the natural, intact longitudinal arch of the foot.<br>• The improved heel damping is kind to the entire musculoskeletal system – from foot to spinal column.<br>• Improvement of the shoe climate thanks to the PU foam's open cell structure. So the foot is always kept comfortably dry.<br>• The extreme softness of the PU foam absorbs shocks on impact and increases walking comfort. |
| **PENETRATION RESISTANCE** | |
| Metal-free penetration protection | The textile midsole complies with the penetration safety standard EN 12568 and furthermore fulfils the additional requirements for penetration protection in accordance with EN ISO 20344 / 20345. The light and flexible material enables an increased elasticity of the shoe, which can particularly be recognized when working on uneven grounds or on your knees.<br><br>The textile variant offers 100 % foot coverage compared to steel midsoles (foot coverage 85 % due to limits in the shoe manufacturing process). Being 100 % metal-free and antimagnetic, this equipment is used as penetration protection in safety shoes. |

## 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