TECHNICAL DATA SHEET

DIALUTION Low ESD S3 No. 725511 Sz. 40 - 48







LABELLING ACCORDING TO STANDARD

Standard for safety footwear EN ISO 20345 S3	Basic requirement for S3: **A** Antistatic shoe - **E** Energy absorption in the heel - **FO** Fuel resistance - **WRU** Water penetration and water absorption resistant upper - **P** Penetration resistance - Closed heel area - Profiled outsole
Additional requirements	**SRC** Slip resistance: Slip resistant on floors of ceramic tiles with a sodium lauryl sulfate (SLS) solution and on steel floors with glycerol. When it comes to slip resistance as defined by EN ISO 20345, SRC signifies the best possible rating a safety shoe can reach.

FORM

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

FIT

Much volume	• Thanks to a wider and higher last, the shoe has an increased inner volume
Added volume in the forefoot area	• For more space and less friction inside the shoe during the roll-over movement of the foot
Tall, wide toe cap	• Especially developed for the style Dialution • Offers more space inside the shoe • Avoids pressure points • For more wearing comfort

AREAS OF APPLICATION

Areas of application	Indoors and outdoors Areas where exposure to moisture is expected (S2) Areas where there is a risk of penetration from pointed and sharp objects (S3) Areas where there is a risk of electrostatic discharge (ESDS/ESD)

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.
Padded upper edge	• Excellent wearing comfort: the padded upper edge protects the Achilles tendon.
Padded tongue	• Excellent wearing comfort: The tongue prevents pressure marks.
Seamless upper material	The upper material comes without disturbing / damageable threads: This is why the shoe can easily adapt to the natural shape of the foot. Painful pressure marks are prevented thanks to the seamless workmanship.
Extra-wide upper entrance	• Avoids that sensitive feet get chafe marks when putting on the shoes
Removable inner shoe	• Multilayer, innovative composite material consisting of the following layers: starting skin side with a textile layer which is pervaded by silver-coated threads in order to fulfill the antistatic characteristics; a layer made of a special spacer fabric; a semipermeable layer which forms a barrier against microfungi and bacteria; and a cushioning layer • Washable in a gentle wash cycle at 60°C in a conventional household washing machine • Breathable, skin-friendly materials
Leather-free equipment	• Suitable for persons allergic to leather
PU toe protection (polyurethane)	• Directly applied tip protection • Excellent wear protection in the shoe tip area • Protects the upper material in this area against premature wear
Reinforced heel	• For a stable hold of the foot inside the shoe and as a protection against shocks
Winner Plus X Award	The Plus X Award honours brands for the leading edge in quality and innovation of their products. An independent jury gave award to the style DIALUTION Low ESD S3 in the categories High Quality, Design and Innovation.
UPPER MATERIAL	
Textile material Cordura® (hydrophobized) CORDURA	• Areas of application S2/S3 • Heat-mouldable • Synthetic material • Particularly resistant to wear and tear • Retains its shape • Tear-resistant • Dries quickly • Abrasion-resistant and light • 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 • Good ventilation • Skin-friendly • High absorption and emission of moisture

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

COMPOSITE TOE CAP

INLAY SOLE

Full-length inlay sole DIALUTION 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.
- Pressure-distributing inlay sole
- Prevents injuries (pressure marks)
- Supports the healing process
- Upper made of soft, skin-friendly textile material
- Soft foam padding
- Secretion barrier prevents secretions from entering
- Removable and washable

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. Thanks to its thermo-insulating effect, it also keeps the foot dry and warm.

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

DIALUTION double-density sole with profile





- Excellent slip resistance
- Antistatic

Outsole: PU (polyurethane)

- Colour: lightgrey
- Abrasion-resistant
- Heat-resistant to approx. 130°C
- Flexible at cold temperatures to approx. -20°C
- Oil and fuel resistant
- Profile blocks in the metatarsal area stabilize the longitudinal arch of the foot

Midsole: PU (polyurethane)

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