TECHNICAL DATA SHEET

LUAN black Low ESD S3S No. 720911 — Sz. 35 - 48







LABELLING ACCORDING TO STANDARD

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

FORM

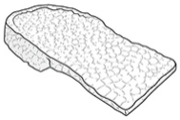
Safety shoe 	Form A - in size 42, the upper height must not exceed 11.2 cm.

AREAS OF APPLICATION

Areas of application	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/ S3L/S3S) Areas where there is a risk of electrostatic discharge (ESDS/ESD) Workplaces on hard Undergrounds: The revolutionary Infinergy® sole core cushions impacts and provides for a rebound effect when the compressive impulse subsides - for more energy in every step.

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 35 - 48

FEATURES	
Certification in accordance with DGUV rule 112-191	• Certified for orthopaedic modifications / inserts
Padded upper edge	• Excellent wearing comfort: the padded upper edge protects the Achilles tendon.
Padded tongue	• Excellent wearing comfort: The tongue prevents pressure marks.
Sole core made of Infinergy® by BASF 	The sole core consists of expanded, thermoplastic polyurethane in the form of oval foam beads. These stick together and are very light and elastic. This revolutionary technology cushions the impact and bounces back extremely well on pressure, so that the energy can be returned to the wearer. Even under low temperatures of -20 °C, the core maintains its high elasticity.
Laces and stitching made from 100% recycled material	Laces made from 100% recycled polyester. Sewing thread made of 100% recycled PET bottles.
Leather-free equipment	• Suitable for persons allergic to leather
UPPER MATERIAL	
Hydrophobized microfibre	• Areas of application S2/S3 • Synthetic material with recycled material content • Particularly soft • 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
Heel pocket lining	• The abrasion-resistant microfibre material is particularly sturdy and provides for a pleasant wearing comfort.
TOE PROTECTION CAP	
Steel 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

INLAY SOLE

Full-length inlay sole SPORTIVE ESD (rec)



- 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.
- Inlay sole with recycled material content
- The full-length, exchangeable inlay sole provides the highest possible comfort in safety shoes.
- 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.

PENETRATION RESISTANCE

Metal-free penetration protection with recycled material content

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.

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.

The metal-free midsole (penetration protection) is made from 20% recycled polyester.

OUTSOLE

MAXXIMO extended wedge double-density sole





- Excellent slip resistance
- Antistatic

Outsole: TPU (thermoplastic polyurethane)

- Colour: black
- Profile depth: 3.5 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) with a core made of Infinergy® by BASF

- The soft PU core provides a good impact absorption and high wearing comfort
- The core made of Infinergy® provides a very good cushioning with rebound effect

RECYCLING MATERIAL



PERCENTAGES RECYCLED MATERIAL

Upper material 52%

Laces and stitching 100%

Breathable fabric lining 72%

Inlay sole 75%

Metal-free midsole (penetration protection) 20%

Small parts 9%