

# FIT FOR JOB



technoLASA<sup>com</sup>



Extract from our  
ESD assortment

ABEBA®

[www.abeba.com](http://www.abeba.com)

# ESD

# ELECTROSTATIC

# DISCHARGE

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Potential differences occur by friction or by contact and separation of two objects. A human body can be charged up to a voltage of 30,000 volts. An electrostatic discharge of less than 3000 volts will not be perceptible by the person involved. The majority of electronic components are sensitive to electrostatic discharges of only 5 to 30 volts and damage without any noticeable discharge.

An electrostatic discharge of a few tens of volts is enough to generate the explosion of certain solvents or chemicals. ESD protective measures are therefore essential to control the risks due to electrostatic charges.

This consists in particular of avoiding electrical charges and thus preventing sudden and dangerous discharges from the person to the sensitive component or the sensitive atmosphere (Atex Zones).

The most effective method of protection is the grounding of people by using ESD footwear in combination with a dissipative floor.

According to EN 61340-5-1 footwear is classified as ESD dissipative footwear if the electrical resistance in the system human body - footwear - ground is less than 35 M $\Omega$  (workplace testing).

The ESD qualification according to the 61340-4-3 standard is carried out in the laboratory according to climatic classes 1 (12% relative humidity), climatic class 2 (25% relative humidity) and climatic class 3 (50% relative humidity).

After the shoes are pre-conditioned according to climate class, they are filled with metal balls and placed on a metal plate.

The electrical resistance in the shoe-to-metal-plate system must not exceed 100 M $\Omega$ .

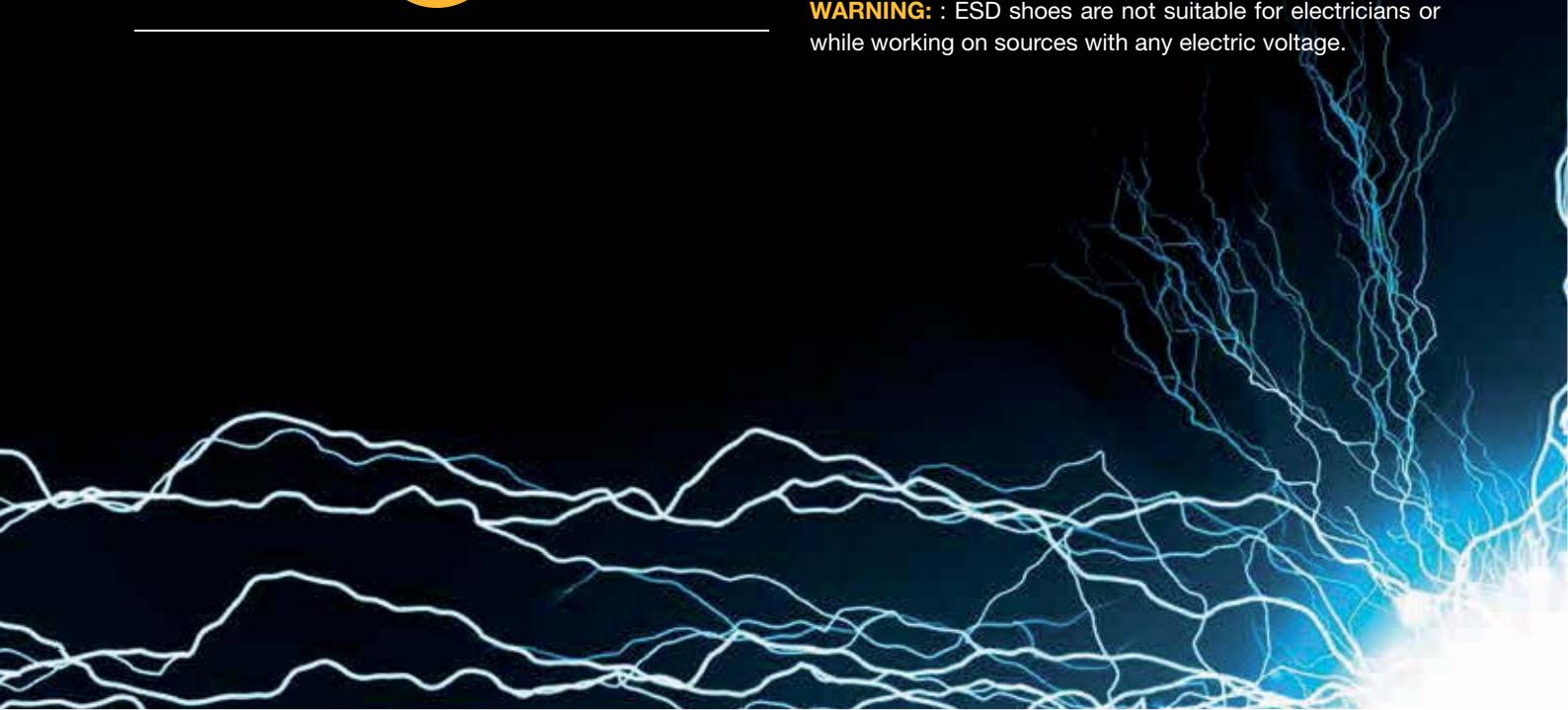
The electrical resistance of ESD footwear is strongly influenced by the climatic conditions (relative humidity and temperature) and by factors such as dirt, floor covering, or the transversal resistance of the person.

It is therefore recommended that the user performs regular electrical resistance tests under real conditions.

In critical areas, the resistance of the ground must be such that the protective function of the shoe is not neutralised. The „walking test“ allows an exact evaluation of the footwear-floor system.



**WARNING:** : ESD shoes are not suitable for electricians or while working on sources with any electric voltage.





## DEFINITION

### ESD - Electrostatic Discharge

Electrostatic discharge is caused by an imbalance of potential on charged objects or people by contact or close proximity.

### ESDS

Electrostatic Discharge Sensitive Device

### EPA

Electrostatic Protected Area

Area where sensitive devices can be handled directly with minimum risk of electrostatic damage.

### Electrostatic charge

Is produced by frictional contact and separation of two materials.

### Resistance to ground (Rg) EN 61340

Is the resistance from a surface or an item within an EPA, measured with a suitable ohmmeter and test probe.

### Latent damage

Is the damage caused by ESD to sensitive devices, which has the effect of reducing components reliability without causing immediate failure.



### ESD SUSCEPTIBLE

The symbol has been used since 1984 and denotes components and subassemblies that are ESD susceptible.

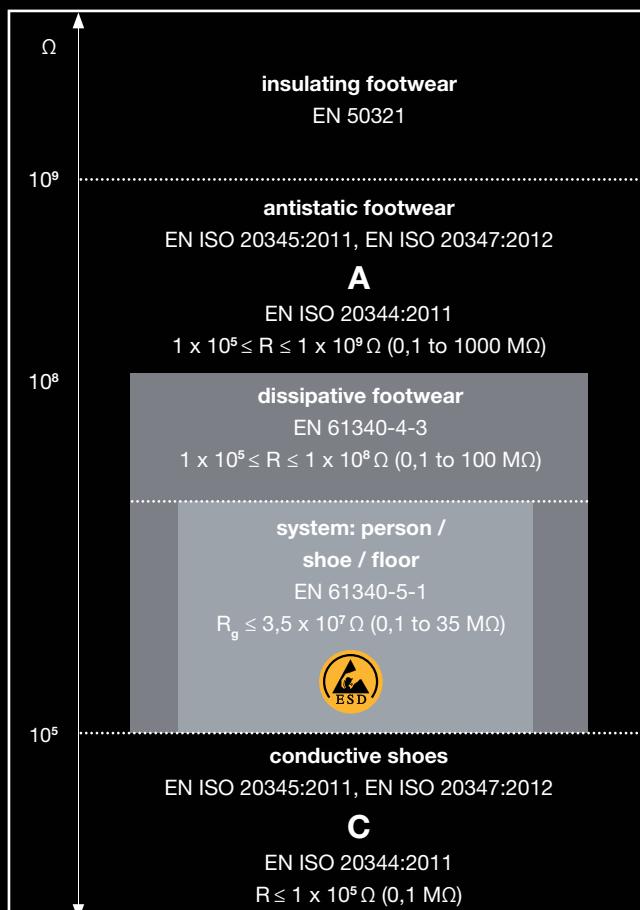


### ESD PROTECTIVE

The symbol was introduced in addition to symbol No. 1 in 1993 and denotes ESD protective products such as antistatic mats, trucks, clothing, protective covering, cartons, shoes, etc.

## INFORMATION

Electrical resistance and protection against electrostatic phenomena. ESD-footwear as primary grounding in the system of person/ shoe/ floor



A and C: additional requirements of occupational- and safety shoes regarding electric property. R: electrical resistance.  $R_g$ : ground resistance.

For the daily function testing of the shoes the use of test stations has been established. There the resistance of person and shoe is measured. Attention should be paid to the separate measuring of the feet.

### Electrical resistance

$10^3 \text{ Ohm} =$	$0,001 \text{ MOhm} =$	$1 \text{ kOhm}$
$10^4 \text{ Ohm} =$	$0,01 \text{ MOhm} =$	$10 \text{ kOhm}$
$10^5 \text{ Ohm} =$	$0,1 \text{ MOhm} =$	$100 \text{ kOhm}$
$10^6 \text{ Ohm} =$	$1 \text{ MOhm} =$	$1.000 \text{ kOhm}$
$10^7 \text{ Ohm} =$	$10 \text{ MOhm}$	
$10^8 \text{ Ohm} =$	$100 \text{ MOhm}$	
$10^9 \text{ Ohm} =$	$1.000 \text{ MOhm} =$	$1 \text{ GOhm}$
$10^{10} \text{ Ohm} =$	$10.000 \text{ MOhm} =$	$10 \text{ GOhm}$
$10^{11} \text{ Ohm} =$	$100.000 \text{ MOhm} =$	$100 \text{ GOhm}$
$10^{12} \text{ Ohm} =$	$1.000.000 \text{ MOhm} =$	$1.000 \text{ GOhm}$

# CLIMATE CLASS 1

## CLIMATE CLASS I

All ABEBA ESD shoes are certified according to the European standard EN 61340-4-3 according to climatic class 1.

In general, the climate classes guarantee the electrostatic properties of the shoes. For their classification, the electrical measurements must be carried out under specific conditions, as shown in the following table.

Climate class	Pre-treatment	Conditioning	Measurement
1	96 (+10) h (40 +/- 3) °C RH < 15 %	96 (+10) h (23 +/- 2) °C (12 +/- 3) % RH	(23 +/- 2) °C (12 +/- 3) % RH
2		96 (+10) h (23 +/- 2) °C (25 +/- 3) % RH	(23 +/- 2) °C (25 +/- 3) % RH
3		48 (+ 5) h (23 +/- 2) °C (50 +/- 5) % RH	(23 +/- 2) °C (50 +/- 5) % RH

h = duration in hours, °C = temperature, % RH = relative humidity

The distinction between the various climate classes 1, 2 and 3 is mainly based on the relative humidity of the air in the environment during the control process. The relative humidity influences the electrostatic discharge capacity of the footwear during the test.

The certification test for climatic class 3 of the shoes is carried out in an environment with an air humidity of 50% and for climate class 2 a humidity of 25 %. For climatic class 1, the test must be passed with an air humidity of 12 %. All tests are performed at a temperature of 23°C.

Therefore, a shoe certified according to climate class 1 is the most suitable shoe to guarantee the electrostatic voltage dissipation capacity. The dissipation of electrostatic charges is guaranteed even in conditions of low air humidity and dry materials, thus avoiding sudden discharges.

However, all other environmental influences that may have an effect on electrostatic discharge, such as a more insulating floor or insulating deposits on outersoles, must also be taken into account.

Wearing footwear that is certified Climate Class 1 is highly recommended, not only in the chemical and electrical industries, when handling flammable liquids and gases, paints and varnishes, but also in classic sectors generating intense dust production, such as printing companies, mills and grain warehouses or forestry companies, where a static electricity discharge can generate an ignition or explosion.

### Technical Rules for Operational Safety (TRBS 2153 & ISO 20023:2018)

Section 7.1 of TRBS 2153 requires the wearing of dissipative footwear with a contact resistance of less than 100 megohms in hazardous areas. Our shoes meet this requirement according to EN 61340-4-3 (test with metal balls in the shoe on a metal plate) and EN 61340-5-1 (test with a person in the shoe on a metal plate).

## WALKING TEST

Practical experience has shown that merely testing the shoes' contact resistances will not ensure adequate employee protection from accumulating excessive charges. We would also recommend additionally the ESD qualification Walking test (as per EN 61340-4-5, limit < 100 V) for the shoe/Floor-system in the areas concerned.

### The following aspects need to be considered with dissipative shoes:

- Effective person grounding is only possible in combination with conductive floors.
- Dirt in the outer sole or dust deposits can generate an insulating layer.
- External climatic conditions (e.g. low air humidity) can have a negative effect on contact resistance.
- Orthopaedic insoles and orthopaedic designs must not impair the footwear's discharge capacity.

HIGH ORIGINAL / THE ORIGINAL PLUS / EASY



Art. 37631

high  
ORIGINAL



5001

CE, EN ISO 20347:2012 OB, A, E, FO, SRC  
Size 36-42 | smooth leather white, perforated | heel patch leather |  
heel strap foldable, adjustable | wedge heel 45 mm | narrow fit |  
slip-resistant PU outsole

the ORIGINAL +



micro

37530

CE, EN ISO 20347:2012 OB, A, E, FO, SRC  
Size 36-42 | microfibre black, perforated | heel patch microfibre |  
heel strap foldable, adjustable | slip-resistant TPU outsole



micro

37520

CE, EN ISO 20347:2012 OB, A, E, FO, SRC  
Size 36-42 | microfibre white, perforated | heel patch microfibre |  
heel strap foldable, adjustable | slip-resistant TPU outsole



easy



37630

CE, EN ISO 20347:2012 OB, A, E, FO, SRC  
Size 35-48 | smooth leather white, perforated | heel strap foldable,  
adjustable | replaceable Active Comfort insole (art. 352710) | slip-  
resistant TPU outsole



37631

CE, EN ISO 20347:2012 OB, A, E, FO, SRC  
Size 35-48 | smooth leather black, perforated | heel strap foldable,  
adjustable | replaceable Active Comfort insole (art. 352710) | slip-  
resistant TPU outsole




**OB**

**37329**

CE, EN ISO 20347:2012 OB, A, E, FO, SRC

Size 35-48 | knitted textile white | protection against splash water | heel strap non-foldable, adjustable | replaceable Active Comfort insole (art. 352610) | slip-resistant TPU outsole


**OB**

**37327**

CE, EN ISO 20347:2012 OB, A, E, FO, SRC

Size 35-48 | knitted textile burgundy | protection against splash water | heel strap non-foldable, adjustable | replaceable Active Comfort insole (art. 352610) | slip-resistant TPU outsole


**OB**

**37328**

CE, EN ISO 20347:2012 OB, A, E, FO, SRC

Size 35-48 | knitted textile anthracite | protection against splash water | heel strap non-foldable, adjustable | replaceable Active Comfort insole (art. 352610) | slip-resistant TPU outsole


**OB**

**37326**

CE, EN ISO 20347:2012 OB, A, E, FO, SRC

Size 35-48 | knitted textile light blue | protection against splash water | heel strap non-foldable, adjustable | replaceable Active Comfort insole (art. 352610) | slip-resistant TPU outsole


**OB**

**A<sup>®</sup> micro**
**37341**

CE, EN ISO 20347:2012 OB, A, E, FO, SRC

Size 35-48 | microfibre black/blue with **black breathable textile inlays** | heel strap non-foldable, adjustable | replaceable Active Comfort insole (art. 352610) | slip-resistant TPU outsole

**OB**

**37310**

CE, EN ISO 20347:2012 OB, A, E, FO, SRC

Size 35-48 | smooth leather white with pattern | heel strap foldable, adjustable | replaceable Active Comfort insole (art. 352610) | slip-resistant TPU outsole



DYNAMIC FLOW

DYNAMIC  
flow



01



micro

**37370**

CE, EN ISO 20347:2012 O1, FO, SRC

Size 35-43 | microfibre white, perforated | lining with silver ions | replaceable Active MediFit insole (art. 352630) | slip-resistant TPU outsole



NEW



Art. 37370

01



**37376**

CE, EN ISO 20347:2012 O1, FO, SRC

Size 35-48 | knitted textile black | stretch white fabric | protection against splash water | double elastic band fastening system | replaceable Active MediFit insole (art. 352630) | slip-resistant TPU outsole



01



**37374**

CE, EN ISO 20347:2012 O1, FO, SRC

Size 35-48 | knitted textile burgundy | stretch white fabric | protection against splash water | double elastic band fastening system | replaceable Active MediFit insole (art. 352630) | slip-resistant TPU outsole



01



**37375**

CE, EN ISO 20347:2012 O1, FO, SRC

Size 35-48 | knitted textile anthracite | stretch white fabric | protection against splash water | double elastic band fastening system | replaceable Active MediFit insole (art. 352630) | slip-resistant TPU outsole





air cushion



01



**32300**

CE, EN ISO 20347:2012 O1, SRA  
Size 35-47 | grained leather white, perforated | lining microfibre,  
breathable, moisture absorbing | replaceable insole (art. 3551) |  
slip-resistant PU outsole



01



**32310**

CE, EN ISO 20347:2012 O1, SRA  
Size 39-47 | grained leather black, perforated | lining microfibre,  
breathable, moisture absorbing | replaceable insole (art. 3551) |  
slip-resistant PU outsole



01



**micro**

**32370**

CE, EN ISO 20347:2012 O1, SRA  
Size 35-47 | microfibre white | instep area with elastic band |  
integrated footbed | decontaminable | slip-resistant PU outsole



02



**32610**

CE, EN ISO 20347:2012 O2, SRA  
Size 35-47 | grained leather black | lining microfibre, breathable,  
moisture absorbing | replaceable insole (art. 3551) | slip-resistant  
PU outsole



**arrow**



**OB**



Size 36-47

**38200**

**OB**



Size 48-51

**38202**

CE, EN ISO 20347:2012 OB, A, FO, SRA  
smooth leather white | insole microfibre | lining microfibre, breathable, moisture absorbing | heel strap foldable, adjustable | slip-resistant PU outsole



**OB**



Size 36-47

**38210**

**OB**



Size 48-51

**38212**

CE, EN ISO 20347:2012 OB, A, FO, SRA  
smooth leather black | insole microfibre | lining microfibre, breathable, moisture absorbing | heel strap foldable, adjustable | slip-resistant PU outsole



**OB**



Size 36-47

**35600**

**OB**



Size 48-51

**35602**

CE, EN ISO 20347:2012 OB, A, FO, SRA  
smooth leather white, perforated | insole microfibre | lining microfibre, breathable, moisture absorbing | heel strap foldable, adjustable | slip-resistant PU outsole



**OB**



Size 36-47

**38600**

**OB**



Size 48-51

**38602**

CE, EN ISO 20347:2012 OB, A, FO, SRA  
smooth leather white, perforated | insole microfibre | lining microfibre, breathable, moisture absorbing | heel strap non-foldable, adjustable | padded instep with elastic band | slip-resistant PU outsole



## NATURE

NATURE



OB



4080

CE, EN ISO 20347:2012 OB, A, FO, SRC

Size 34-48 | smooth leather white | 2 instep straps, adjustable |  
velcro fastening | slip-resistant special rubber outsole



OB



4085

CE, EN ISO 20347:2012 OB, A, FO, SRC

Size 34-48 | smooth leather black | 2 instep straps, adjustable |  
velcro fastening | slip-resistant special rubber outsole



OB



4086

CE, EN ISO 20347:2012 OB, A, FO, SRC

Size 34-48 | velour blue | 2 instep straps, adjustable | buckle fas-  
tening | slip-resistant special rubber outsole

**NATURE****NATURE****4090**

CE, EN ISO 20347:2012 OB, A, FO, SRC  
Size 34-48 | smooth leather white | heel strap non-foldable, adjustable | 2 instep straps, adjustable | velcro fastening | slip-resistant special rubber outsole

**4040**

CE, EN ISO 20347:2012 OB, A, FO, SRC  
Size 34-48 | smooth leather white | heel strap non-foldable, adjustable | instep strap adjustable | buckle fastening | slip-resistant special rubber outsole

**4045**

CE, EN ISO 20347:2012 OB, A, FO, SRC  
Size 34-48 | smooth leather dark blue, perforated | heel strap non-foldable, adjustable | instep strap adjustable | buckle fastening | slip-resistant special rubber outsole

**4050**

CE, EN ISO 20347:2012 OB, A, FO, SRC  
Size 34-48 | smooth leather white, perforated | heel strap non-foldable, adjustable | instep strap adjustable | buckle fastening | slip-resistant special rubber outsole



# X-light

X-LIGHT



**OB**



**7131141**

CE, EN ISO 20347:2012 OB, A, E, FO, SRC  
Size 35-48 | smooth leather white | lining with silver ions | heel strap foldable, adjustable | instep area with elastic band | replaceable Active Comfort insole (art. 351710) | slip-resistant PU outsole



**OB**



**7131142**

CE, EN ISO 20347:2012 OB, A, E, FO, SRC  
Size 35-48 | smooth leather black | lining with silver ions | heel strap foldable, adjustable | instep area with elastic band | replaceable Active Comfort insole (art. 351710) | slip-resistant PU outsole



**OB**



**7131135**

CE, EN ISO 20347:2012 OB, A, E, FO, SRC  
Size 35-48 | smooth leather black | lining with silver ions | heel strap non-foldable, adjustable | instep area with elastic band | replaceable Active Comfort insole (art. 351710) | slip-resistant PU outsole

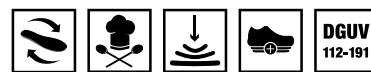


**OB**



**7131130**

CE, EN ISO 20347:2012 OB, A, E, FO, SRC  
Size 35-48 | smooth leather white | lining with silver ions | heel strap non-foldable, adjustable | instep area with elastic band | replaceable Active Comfort insole (art. 351710) | slip-resistant PU outsole



**O2**



**7131137**

CE, EN ISO 20347:2012 O2, FO, SRC  
Size 35-48 | smooth leather black | lining with silver ions | instep area with elastic band | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole



**O2**



**7131132**

CE, EN ISO 20347:2012 O2, FO, SRC  
Size 35-48 | smooth leather white | lining with silver ions | instep area with elastic band | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole



X-LIGHT

x-light



02



micro

7131129

CE, EN ISO 20347:2012 O2, FO, SRC

Size 35-48 | microfibre black | lining with silver ions | instep area with elastic band | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole



02



micro

7131128

CE, EN ISO 20347:2012 O2, FO, SRC

Size 35-48 | microfibre white | lining with silver ions | instep area with elastic band | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole



01



7131136

CE, EN ISO 20347:2012 O1, FO, SRC

Size 35-48 | smooth leather black **with grey breathable textile inlays** | lining with silver ions | double velcro fastening | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole



01



7131131

CE, EN ISO 20347:2012 O1, FO, SRC

Size 35-48 | smooth leather white **with grey breathable textile inlays** | lining with silver ions | double velcro fastening | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole



Art. 7131131



## x-light



02



micro

**7131126**

CE, EN ISO 20347:2012 O2, FO, SRC

Size 35-48 | microfibre white | lining with silver ions | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole



02



micro

**7131127**

CE, EN ISO 20347:2012 O2, FO, SRC

Size 35-48 | microfibre black | lining with silver ions | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole



02



micro

**7131146**

CE, EN ISO 20347:2012 O2, FO, SRC\*

Size 35-48 | microfibre black | lining with silver ions | double velcro fastening | replaceable Active Comfort insole (art. 351610) | scuff resistant overcap | slip-resistant PU outsole



01

**7131156**

CE, EN ISO 20347:2012 O1, FO, SRC\*

Size 35-48 | smooth leather black with **breathable textile inlays** | lining with silver ions | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole

Art. 7131156



02



micro

**7131147**

CE, EN ISO 20347:2012 O2, FO, SRC\*

Size 35-48 | microfibre white | lining with silver ions | double velcro fastening | replaceable Active Comfort insole (art. 351610) | scuff resistant overcap | slip-resistant PU outsole



x-light



01



7131158

CE, EN ISO 20347:2012 O1, FO, SRC\*

Size 35-48 | smooth leather white with **breathable textile inlays** | lining with silver ions | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole



NEW



01



7131150

CE, EN ISO 20347:2012 O1, FO, SRC

Size 35-48 | velours microfibre black/neon orange | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole



02



7131138

CE, EN ISO 20347:2012 O2, FO, SRC

Size 35-48 | smooth leather black | lining with silver ions | reflective stripes | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole



NEW



02

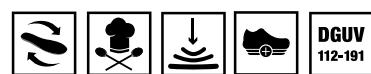


A<sup>®</sup> micro

7131124

CE, EN ISO 20347:2012 O2, FO, SRC

Size 35-48 | microfibre-textile white | water-repellent | lining with silver ions | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole



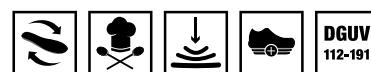
02



7131133

CE, EN ISO 20347:2012 O2, FO, SRC

Size 35-48 | smooth leather white | lining with silver ions | reflective stripes | replaceable Active Comfort insole (art. 351610) | slip-resistant PU outsole



**uni6****01**

micro

**36795**

CE, EN ISO 20347:2012 O1, FO, SRC

Size 35-48 | microfibre white | lining microfibre, breathable, moisture absorbing | instep area with velcro fastening | replaceable Active Comfort insole (art. 352510) | slip-resistant TPU outsole

DGUV  
112-191**02**

micro

**36740**

CE, EN ISO 20347:2012 O2, FO, SRC

Size 35-48 | microfibre white | lining with silver ions | instep area with elastic band | replaceable Active Comfort insole (art. 352510) | slip-resistant TPU outsole



HACCP

DGUV  
112-191**01****36721**

CE, EN ISO 20347:2012 O1, FO, SRC

Size 35-48 | velour black with **breathable textile inlays** | lining with silver ions | replaceable Active Comfort insole (art. 352510) | slip-resistant TPU outsoleDGUV  
112-191**02****36728**

CE, EN ISO 20347:2012 O2, FO, SRC

Size 35-48 | microfiber-textile black with pattern | water-repellent | lining with silver ions | replaceable Active Comfort insole (art. 352510) | slip-resistant TPU outsole

DGUV  
112-191**02****36729**

CE, EN ISO 20347:2012 O2, FO, SRC

Size 35-48 | microfiber-textile white with pattern | water-repellent | lining with silver ions | replaceable Active Comfort insole (art. 352510) | slip-resistant TPU outsole

DGUV  
112-191

**02****36773**

CE, EN ISO 20347:2012 O2, FO, SRC

Size 35-48 | knitted textile blue | protection against splash water |

lining with silver ions | replaceable Active Comfort insole (art.

352510) | slip-resistant TPU outsole



Art. 36773





02



micro

36787

CE, EN ISO 20347:2012 O2, FO, SRC  
Size 35-48 | microfibre white/black | lining with silver ions |  
replaceable Active Comfort insole (art. 352510) | slip-resistant  
TPU outsole



02



micro

36786

CE, EN ISO 20347:2012 O2, FO, SRC  
Size 35-48 | microfibre white/blue | lining with silver ions |  
replaceable Active Comfort insole (art. 352510) | slip-resistant TPU  
outsole



02



36761

CE, EN ISO 20347:2012 O2, FO, SRC  
Size 35-48 | functional leather black with honeycomb pattern |  
water-repellent | scratch-resistant | lining with silver ions | replaceable  
Active Comfort insole (art. 352510) | slip-resistant TPU outsole





36912

**OB****36902**

CE, EN ISO 20347:2012 OB, A, E, SRB

Size 36-42 | smooth leather white | lining microfibre, breathable, moisture absorbing | triple velcro fastening | 2 replaceable Reflexor® insoles (art. 3585/3567) | slip-resistant PU outsole


**DGUV**  
112-191

## Reflexor COMFORT

**OB****36872**

CE, EN ISO 20347:2012 OB, A, E, SRB

Size 36-43 | velours black | lining microfibre, breathable, moisture absorbing | heel strap non-foldable, adjustable | instep area with elastic band | replaceable Reflexor® insole (art. 3572) | slip-resistant PU outsole



## AUTO- CLAVABLE

**OB****39620**

CE, EN ISO 20347:2012 OB, A, E, SRC

Double sizes\* 35/**36** - 45/**46** | special material green | heel strap foldable, adjustable | autoclavable | slip-resistant outsole**01****35710**

CE, EN ISO 20347:2012 O1, SRB

Size 40-46 | smooth leather black | lining microfibre, breathable, moisture absorbing | 2 replaceable Reflexor® insoles (art. 3566/3570) | slip-resistant PU outsole


**DGUV**  
112-191


## CLEAN ROOM

**01****3620**

CE, EN ISO 20347:2012 O1, SRA

Size 35-47 | microfibre white | fixed gaitor, cleanroom textile





## MANAGER



**3120**

Size 39-47 | calf leather black | lining microfibre, breathable, moisture absorbing | top layer microfibre | ESD dissipative leather outsole

## BUSINESS LADY



**3940**

Size 36-42 | smooth leather black | lining microfibre, moisture absorbing | heel 60 mm | ESD dissipative outsole

## BUSINESS MEN



**01**



**32450**

CE, EN ISO 20347:2012 O1, SRB  
Size 40-47 | smooth leather black | lining microfibre, breathable, moisture absorbing | insole microfibre | slip-resistant ESD dissipative rubber outsole



## SERVICE



**01**



**300219**

CE, EN ISO 20347:2012 O1, FO, SRC

Size 35-43 | microfibre black in leather optic | lining microfibre, breathable, moisture absorbing | instep area with lacing | slip-resistant PU/rubber outsole



**01**



**300119**

CE, EN ISO 20347:2012 O1, FO, SRC

Size 35-43 | microfibre black in leather optic | lining microfibre, breathable, moisture absorbing | instep area with elastic band | slip-resistant PU/rubber outsole





# SAFETY SHOES





## Classic

**SB****31000**

CE, EN ISO 20345:2011 SB, A, E, FO, SRC

Size 36-46 | grained leather white | lining microfibre, breathable, moisture absorbing | heel patch microfibre | heel strap foldable, adjustable | instep strap adjustable | buckle fastening | slip-resistant PU outsole

**SB****31010**

CE, EN ISO 20345:2011 SB, A, E, FO, SRC

Size 36-46 | grained leather black | lining microfibre, breathable, moisture absorbing | heel patch microfibre | heel strap foldable, adjustable | instep strap adjustable | buckle fastening | slip-resistant PU outsole



Art. 7131036

**S1****7131036**

CE, EN ISO 20345:2011 S1, SRC

Size 35-48 | smooth leather black **with grey breathable textile inlays** | lining with silver ions | double velcro fastening | replaceable Active Comfort insole (art. 351620) | slip-resistant PU outsole



**7131031**

CE, EN ISO 20345:2011 S1, SRC  
Size 35-48 | smooth leather white **with grey breathable textile inlays** | lining with silver ions | double velcro fastening | replaceable Active Comfort insole (art. 351620) | slip-resistant PU outsole

**STEEL** **S** **ESD** **↑↓** **FO** **DGUV**  
112-191

**x-light**

**7131042**   
**7131041**

**SB** **ESD**

CE, EN ISO 20345:2011 SB, A, E, FO, SRC  
Size 35-48 | smooth leather white | lining with silver ions | heel strap foldable, adjustable | instep area with elastic band | replaceable Active Comfort insole (art. 351720) | slip-resistant PU outsole



**7131035**

**SB** **ESD**

CE, EN ISO 20345:2011 SB, A, E, FO, SRC  
Size 35-48 | smooth leather black | lining with silver ions | heel strap foldable, adjustable | instep area with elastic band | replaceable Active Comfort insole (art. 351720) | slip-resistant PU outsole



**7131030**

**SB** **ESD**

CE, EN ISO 20345:2011 SB, A, E, FO, SRC  
Size 35-48 | smooth leather white | lining with silver ions | heel strap foldable, adjustable | instep area with elastic band | replaceable Active Comfort insole (art. 351720) | slip-resistant PU outsole





# X-light

X-LIGHT



S3



micro

**7131827**

CE, EN ISO 20345:2011 S3, SRC

Size 35-48 | microfibre/ textile black | water-repellent | lining with silver ions | replaceable Active Comfort insole (art. 351620) | metal free penetration resistance | slip-resistant PU outsole



DGUV  
112-191



S1



**7131058**

CE, EN ISO 20345:2011 S1, SRC

Size 35-48 | smooth leather white with **breathable textile inlays** | lining with silver ions | replaceable Active Comfort insole (art. 351620) | slip-resistant PU outsole



DGUV  
112-191

S1



**7131056**

CE, EN ISO 20345:2011 S1, SRC

Size 35-48 | smooth leather black with **breathable textile inlays** | lining with silver ions | replaceable Active Comfort insole (art. 351620) | slip-resistant PU outsole



DGUV  
112-191

X-LIGHT

NEW



S2



micro

**7131047**

CE, EN ISO 20345:2011 S2, SRC

Size 35-48 | microfibre white | lining with silver ions | double velcro fastening | replaceable Active Comfort insole (art. 351620) | scuff resistant overcap | slip-resistant PU outsole



NEW



S2



micro

**7131046**

CE, EN ISO 20345:2011 S2, SRC

Size 35-48 | microfibre black | lining with silver ions | double velcro fastening | replaceable Active Comfort insole (art. 351620) | scuff resistant overcap | slip-resistant PU outsole



NEW



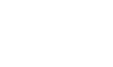
S1



**7131050**

CE, EN ISO 20345:2011 S1, SRC

Size 35-48 | velours microfibre black/neon orange | replaceable Active Comfort insole (art. 351620) | slip-resistant PU outsole



S2



**7131032**

CE, EN ISO 20345:2011 S2, SRC

Size 35-48 | smooth leather white | lining with silver ions | instep area with elastic band | replaceable Active Comfort insole (art. 351620) | slip-resistant PU outsole



S2



**7131037**

CE, EN ISO 20345:2011 S2, SRC

Size 35-48 | smooth leather black | lining with silver ions | instep area with elastic band | replaceable Active Comfort insole (art. 351620) | slip-resistant PU outsole



x-light



X-LIGHT / UNI6

## X-light

**S2****7131038**

CE, EN ISO 20345:2011 S2, SRC

Size 35-48 | smooth leather black | lining with silver ions | reflective stripes | replaceable Active Comfort insole (art. 351620) | slip-resistant PU outsole

**S2****7131033**

CE, EN ISO 20345:2011 S2, SRC

Size 35-48 | smooth leather white | lining with silver ions | reflective stripes | replaceable Active Comfort insole (art. 351620) | slip-resistant PU outsole

**S2****7131029**

CE, EN ISO 20345:2011 S2, SRC

Size 35-48 | microfibre black | lining with silver ions | instep area with elastic band | replaceable Active Comfort insole (art. 351620) | slip-resistant PU outsole

**uni6****S2****7131028**

CE, EN ISO 20345:2011 S2, SRC

Size 35-48 | microfibre white | lining with silver ions | instep area with elastic band | replaceable Active Comfort insole (art. 351620) | slip-resistant PU outsole

**S3****31629**

CE, EN ISO 20345:2011 S3, SRC

Size 35-48 | microfibre/ textile white with pattern | water-repellent | lining with silver ions | replaceable Active Comfort insole (art. 352520) | metal free penetration resistance | slip-resistant TPU outsole

**S3****31628**

CE, EN ISO 20345:2011 S3, SRC

Size 35-48 | microfibre/ textile black with pattern | water-repellent | lining with silver ions | replaceable Active Comfort insole (art. 352520) | metal free penetration resistance | slip-resistant TPU outsole







31775

Art. 31775

**S2** 

CE, EN ISO 20345:2011 S2, SRC  
Size 35-48 | knitted textile anthracite | protection against splash water | lining with silver ions | replaceable Active Comfort insole (art. 352520) | slip-resistant TPU outsole



31772



31773



31774



31676 in S3



ART. 31780 WITH  
BLUE LACES

Set of shoelaces art. 370118,  
Set of 3 colours (red, bleu and green),  
lace length 80 cm suitable  
for ALL low cut lace-up shoes!

**31780**

CE, EN ISO 20345:2011 S2, SRC  
Size 35-48 | microfibre white | lining with silver ions | replaceable Active Comfort insole (art. 352520) | slip-resistant TPU outsole

**uni6**

UNI6

**S1**

micro

**31795**

CE, EN ISO 20345:2011 S1, SRC

Size 35-48 | microfibre white | lining microfibre, breathable, moisture absorbing | replaceable Active Comfort insole (art. 352520) | slip-resistant TPU outsole

**S2**

micro

**31740**

CE, EN ISO 20345:2011 S2, SRC

Size 35-48 | microfibre white | lining with silver ions | instep area with elastic band | replaceable Active Comfort insole (art. 352520) | slip-resistant TPU outsole

**S1****31762**

CE, EN ISO 20345:2011 S1, SRC

Size 35-48 | functional leather blue with honeycomb pattern | water-repellent | scratch-resistant | lining with silver ions | replaceable Active Comfort insole (art. 352520) | slip-resistant TPU outsole

**S3****31765**

CE, EN ISO 20345:2011 S3, SRC

Size 35-48 | functional leather black with honeycomb pattern | water-repellent | scratch-resistant | lining with silver ions | replaceable Active Comfort insole (art. 352520) | metal free penetration resistance | slip-resistant TPU outsole

**S2****31761**

CE, EN ISO 20345:2011 S2, SRC

Size 35-48 | functional leather black with honeycomb pattern | water-repellent | scratch-resistant | lining with silver ions | replaceable Active Comfort insole (art. 352520) | slip-resistant TPU outsole



NEW

**S1P****32283**

CE, EN ISO 20345:2011 S1P, SRC

Size 36-**52** | Cordura® Textile yellow/green with dot pattern | water-, abrasion- and tear-resistant | lining with silver ions | reflective stripes | double velcro fastening | replaceable Active Comfort insole (art. 352320) | metal free penetration resistance | slip-resistant PU/PU outsole

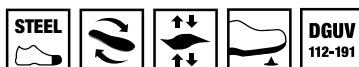


NEW

**S1P****32282**

CE, EN ISO 20345:2011 S1P, SRC

Size 36-48 | Cordura® Textile blue with dot pattern | water-, abrasion- and tear-resistant | lining with silver ions | reflective stripes | double velcro fastening | replaceable Active Comfort insole (art. 352320) | metal free penetration resistance | slip-resistant PU/PU outsole

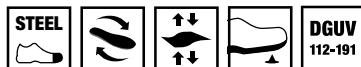


NEW

**S3****32251**

CE, EN ISO 20345:2011 S3, SRC

Size 36-**52** | Cordura® Textile yellow/green with dot pattern | water-, abrasion- and tear-resistant | lining with silver ions | reflective stripes | replaceable Active Comfort insole (art. 352320) | metal free penetration resistance | slip-resistant PU/PU outsole

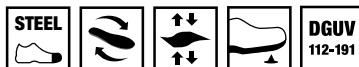


NEW

**S3****32252**

CE, EN ISO 20345:2011 S3, SRC

Size 36-48 | Cordura® Textile blue with dot pattern | water-, abrasion- and tear-resistant | lining with silver ions | reflective stripes | replaceable Active Comfort insole (art. 352320) | metal free penetration resistance | slip-resistant PU/PU outsole

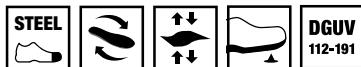


NEW

**S3****32257**

CE, EN ISO 20345:2011 S3, SRC

Size 36-48 | Cordura® Textile orange with with dot pattern | water-, abrasion- and tear-resistant | lining with silver ions | reflective stripes | replaceable Active Comfort insole (art. 352320) | metal free penetration resistance | slip-resistant PU/PU outsole

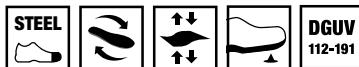


NEW

**S3****32238**

CE, EN ISO 20345:2011 S3, SRC

Size 36-48 | Cordura® Textile red/black with warp pattern | water-, abrasion- and tear-resistant | lining with silver ions | reflective stripes | replaceable Active Comfort insole (art. 352320) | metal free penetration resistance | slip-resistant PU/PU outsole





anatom

ANATOM



SB



micro

32120

CE, EN ISO 20345:2011 SB, A, E, FO, SRC  
Size 36-**52** | microfibre white | lining with silver ions | heel strap foldable, adjustable | instep strap adjustable, with elastic band | replaceable Active Comfort insole (art. 352420) | slip-resistant PU outsole



SB



micro

32125

CE, EN ISO 20345:2011 SB, A, E, FO, SRC  
Size 36-**52** | microfibre black | lining with silver ions | heel strap foldable, adjustable | instep strap adjustable, with elastic band | replaceable Active Comfort insole (art. 352420) | slip-resistant PU outsole



S1



32189

CE, EN ISO 20345:2011 S1, SRC  
Size 36-**52** | velour black **with breathable textile inlays** | lining with silver ions | instep strap adjustable | reflective stripes | replaceable Active Comfort insole (art. 352320) | slip-resistant PU outsole



S1



micro

2616

CE, EN ISO 20345:2011 S1, SRC  
Size 36-**50** | microfibre white, **perforated** | lining with silver ions | double velcro fastening | reflective stripes | replaceable Active Comfort insole (art. 352320) | slip-resistant PU outsole



S2



micro

32130

CE, EN ISO 20345:2011 S2, SRC  
Size 36-**52** | microfibre white | lining with silver ions | instep strap adjustable, with elastic band | replaceable Active Comfort insole (art. 352320) | slip-resistant PU outsole



S1



micro

2626

CE, EN ISO 20345:2011 S1, SRC  
Size 36-**52** | microfibre white **with breathable textile inlays** | lining with silver ions | reflective stripes | replaceable Active Comfort insole (art. 352320) | slip-resistant PU outsole



## **CRAWLER / BUSINESS MEN**



34555

CE, EN ISO 20345:2011 SB, A, E, FO, SRC  
Size 36-48 | microfibre white | scratch-resistant coating in toe area |  
lining with silver ions | heel strap foldable, adjustable | instep strap  
adjustable, with elastic band | replaceable Active Comfort insole  
(art. 352020) | **aluminium toe-cap** | slip-resistant TPU outsole



34556

CE, EN ISO 20345:2011 SB, A, E, FO, SRC  
Size 36-48 | microfibre black | scratch-resistant coating in toe area |  
lining with silver ions | heel strap foldable, adjustable | instep strap  
adjustable, with elastic band | replaceable Active Comfort insole  
(art. 352020) | **aluminium toe-cap** | slip-resistant TPU outsole



34581

CE, EN ISO 20345:2011 S1, SRC  
Size 36-48 | velour black/blue | lining with silver ions | replaceable  
Active Comfort insole (art. 351920) | **aluminium toe-cap** |  
slip-resistant TPU outsole



**33230**

CE, EN ISO 20345:2011 S2, SRA  
Size 36-48 | smooth leather black | lining microfibre, breathable,  
moisture absorbing | slip-resistant ESD dissipative rubber outsole



33240

CE, EN ISO 20345:2011 S2, SRA  
Size 36-48 | smooth leather black | lining microfibre, breathable,  
moisture absorbing | slip-resistant ESD dissipative rubber outsole





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Avoid electrostatic charging of people and materials.

**Solution :**

Using **ABEBA ESD** shoes in combination with a functional earthing system.

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