ATEX – ABEBA - for explosive areas

ATEX = ATmosphère EXplosible
(explosive atmosphere)

Accidents at work in explosive areas (EX-areas) mostly cause bigger consequences than in other areas. That’s why it is even more important to pay attention to the work safety in these special areas. Where explosive air / gas or air / dust mixtures can’t be embanked the following activities must be initiated:

- Classification of endangered areas into zones
- Avoiding of ignition sources
- Constructive explosion protection

One of the ignition sources can be the electrical discharge. This can be effectively avoided by anti-static garments, materials and tools. Our anti-static shoes have been used in ESD-areas (Electro Static Discharge) for years. Combined with a dissipative flooring covering ABEBA ESD shoes avoid the electrostatic charge of the wearer.

The styles of our ATEX range are the first shoes within Europe certified for the use in EX-areas. We would certainly provide you with the corresponding TÜV certificates if needed. The following norms and directives have been taken into account:

- EC Directive 99/92/EC
- EN 61340-4-3:2001 (climate classification 1 and 2)
- CLC/TR 50404:2003

Additionally our safety and occupational shoes come with the following specifications:

- Replaceable insoles
- Certified for the following orthopedic changes: orthopedic insoles and sole heightening (see markings)
- Metal free penetration resistance
- Washable up to 30°C (Art. 32131 and 32136), (see markings)
- Many styles up to size 52 (see article description)

Ask us.
We help you taking care of your employees’ safety.

according to EN 61340-4-3,
climate classification 1, 23 ± 2°C, 12% ± 3% RH
or
climate classification 2, 23 ± 2°C, 25% ± 3% RH
Ignition source electrostatic discharge

The electrostatic discharge is caused by an imbalance of potential on charged objects or people. A human body which is not provided with an ESD-shoe can be charged up to several kilovolts (kv). This generated charge can be decreased by the use of ESD-shoes. One way to estimate the risk of electrostatic discharge is to evaluate the minimum ignition energy (MIE) of the explosive atmosphere. The MIE - measured in millijoule (mJ) – is a parameter to describe the ignition sensitivity of an explosive atmosphere. 3 kv is needed to cause a noticeable sensation to a person. This is similar to an ignition energy of 0.7 mJ. There are explosive substances, for example Benzol, that may explode at an energy of only 0.2 mJ.

Walking test

The experience shows that it is not enough just to control the resistance value of the ESD-shoes. To assure a sufficient protection against the static charge of employees, we recommend to add the walking test (according to EN 61340-4-5 charge must be below 100 V) to complete your security program for explosive areas.

If ESD-shoes are used the following facts should be considered:
- Effective ESD-protection is only assured by using ESD-shoes in combination with an ESD-floor
- Dirt or dust on the outsole may lead to an isolating layer
- Orthopaedic insoles and modifications must not affect the resistance of the shoe

ORTHOstat®

The combination of our ATEX-shoes and our orthopaedic insole ORTOstat® guarantees the required resistance of less than 100 Meg-ohm. Also orthopaedic modifications of the outsole have no influence on the resistance, if these modifications are done according to our instructions by a sub-certified orthopaedic professional.
A-micro is a new and innovative high-tech material which is especially water-resistant and breathable. It even surpasses hydrophobic leather. It is washable up to 30°C without shrinking and anti-bacterial, which is making it perfect for the use in hygienic sensitive areas. Additionally it can be equipped with various treatments such as silver ions.

Due to its special structure it is light and smooth but at the same time very tearproof and resistant. A-micro replicates leather visually without becoming yellow due to direct sunlight.

INFO ICONS

- STEEL TOE-CAP
- COMPOSITE TOE-CAP
- METAL FREE
- REPLACEABLE INSOLE
- ORTHOSTAT (INSOLE)
- SENSOSTAT (INSOLE)
- WASHABLE AT 30° C
- ESD
- HACCP
- IDENTIFICATION
**31132** Size 35-48

CE, EN ISO 20347:2012 O2, FO, SRA
smooth leather white // lightweight PU-sole with high slip resistance // Silver Point lining // elastic band over instep // replaceable acc insole (art. 3555)

**31137** Size 35-48

CE, EN ISO 20347:2012 O2, FO, SRA
smooth leather black // lightweight PU-sole with high slip resistance // Silver Point lining // elastic band over instep // replaceable acc insole (art. 3555)

**31133** Size 35-48

CE, EN ISO 20347:2012 O2, FO, SRA
smooth leather white // lightweight PU-sole with high slip resistance // Silver Point lining // replaceable acc insole (art. 3555) // reflective stripes

**31138** Size 35-48

CE, EN ISO 20347:2012 O2, FO, SRA
smooth leather black // lightweight PU-sole with high slip resistance // Silver Point lining // replaceable acc insole (art. 3555) // reflective stripes
**31032** Size 35-48

CE, EN ISO 20345:2011 S2, SRA
smooth leather white // lightweight PU-sole with high slip resistance // Silver Point lining // replaceable insole with gel shock absorbing (art. 3562)

**31037** Size 35-48

CE, EN ISO 20345:2011 S2, SRA
smooth leather black // lightweight PU-sole with high slip resistance // Silver Point lining // elastic band over instep // replaceable insole with gel shock absorbing (art. 3562)

**31038** Size 35-48

CE, EN ISO 20345:2011 S2, SRA
smooth leather black // lightweight PU-sole with high slip resistance // Silver Point lining // replaceable insole with gel shock absorbing (art. 3562) // reflective stripes

**31033** Size 35-48

CE, EN ISO 20345:2011 S2, SRA
smooth leather white // lightweight PU-sole with high slip resistance // Silver Point lining // elastic band over instep // replaceable insole with gel shock absorbing (art. 3562) // reflective stripes

**31874** Size 35-48

CE, EN ISO 20345:2011 S3, SRA
smooth leather black, ATEX-design // lightweight PU-sole with high slip resistance // Silver Point lining // replaceable insole with gel shock absorbing (art. 3562) // metal free penetration resistance

**31853** Size 35-48

CE, EN ISO 20345:2011 S3, SRA
smooth leather black, ATEX-design // lightweight PU-sole with high slip resistance // Silver Point lining // replaceable insole with gel shock absorbing (art. 3562) // metal free penetration resistance // reflective stripes
31753 Size 35-48
CE, EN ISO 20345:2011 S2, SRC* smooth leather black in ATEX-design // PU/TPU outsole with high slip resistance // lining „on steam®“ // replaceable acc Wave insole (Art. 3576)

ON STEAM®

On steam® is a new breathable high-tech microfiber lining with an absorption capacity of 8 times its weight in water. It offers a maximum comfort and a complete dryness for a perfect foot climate.

Technical characteristics:
- Absorbs moisture and desorbs it to the outside
- Breathable - antimicrobial - odor avoiding
- Temperature regulating
- Anti-allergy
- CO₂ neutral production
- Control of harmful substances according to Öko-Tex Standard 100

acc Wave - air clima comfort

acc - shock absorption system
- Instant absorption (reduces pressure peaks)
- Equal pressure distribution
- Shock absorption on the whole plantar area
- Relieves muscles, ligaments, joints and spine

acc - ventilation
- Air circulates throughout the entire insole
- Immediate draining of perspiration
- Will dry over night
- Feet stay dryer and cooler

acc - bedding system
- Supports the forefoot
- High-wearing comfort
- Supports natural movement
- Best fit thanks to individual adaption

* certification submitted
**32189**  Size 36-52
CE, EN ISO 20345:2007 S1, SRC
velour, textile black // PU/PU-outsole with high slip resistance // instep area adjustable // replaceable acc Wave insole (art. 3580) // reflective stripes

**1122**  Size 36-50
CE, EN ISO 20345:2007 S1, SRC	nubuck black with textile green/black // PU/PU-outsole with high slip resistance // Silver Point lining // replaceable acc Wave insole (art. 3580)

**2626**  Size 36-52
CE, EN ISO 20345:2007 S1, SRC
A-micro white // PU/PU-outsole with high slip resistance // Silvertex lining // replaceable acc Wave insole (art. 3580) // reflective stripes // HACCP

**32147**  Size 36-50
CE, EN ISO 20345:2007 S1, SRC
velour navy blue with textile // PU/PU-outsole with high slip resistance // scratch-resistant coating in toe and heel area // replaceable acc Wave insole (art. 3580) // reflective stripes

**32146**  Size 36-50
CE, EN ISO 20345:2007 S1, SRC
velour brown with textile // PU/PU-outsole with high slip resistance // scratch-resistant coating in toe and heel area // replaceable acc Wave insole (art. 3580) // reflective stripes

**32131**  Size 36-50
CE, EN ISO 20345:2007 S2, SRC
A-micro white // PU/PU-outsole with high slip resistance // Silvertex lining // replaceable acc Wave insole (art. 3580) // HACCP

* certification submitted
32136  Size 36-50
CE, EN ISO 20345:2007 S2, SRC
A-micro black // PU/PU-outsole with high slip resistance //
Silvertex lining // replaceable acc Wave insole (art. 3580) //
HACCP

32156  Size 36-50
CE, EN ISO 20345:2007 S2, SRC
smooth leather black // PU/PU-outsole with high slip resistance //
scratch-resistant coating in toe and heel area // replaceable
acc-wave insole (art. 3580) // reflective stripes

32169  Size 36-50
CE, EN ISO 20345:2007 S2, SRC*
smooth leather black // PU/PU-outsole with high slip resis-
tance // scratch-resistant coating in toe and heel area //
replaceable acc Wave insole (art. 3580) // reflective stripes //
low cut

32168  Size 36-50
CE, EN ISO 20345:2007 S2, SRC
smooth leather black // PU/PU-outsole with high slip resistance //
scratch-resistant coating in toe and heel area // replaceable acc
Wave insole (art. 3580) // reflective stripes

32243  Size 36-48
CE, EN ISO 20345:2007 S1P, SRC*
smooth leather black with textile in ATEX design // PU/
PU-outsole with high slip resistance // replaceable acc Wave
insole (art. 3580) // metal free penetration resistance //
reflective stripes

32247  Size 36-48
CE, EN ISO 20345:2007 S1P, SRC
velour navy blue with textile // PU/PU-outsole with high slip
resistance // scratch-resistant coating in toe and heel area //
replaceable acc Wave insole (art. 3580) // metal free penetra-
tion resistance // reflective stripes
**32254** Size 36-48

CE, EN ISO 20345:2007 S3, SRC*
smooth leather black in ATEX-design // PU/PU-outsole with high slip resistance // scratch-resistant coating in toe and heel area // replaceable acc Wave insole (art. 3580) // metal free penetration resistance

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**32256** Size 36-52

CE, EN ISO 20345:2007 S3, SRC
smooth leather black // PU/PU-outsole with high slip resistance // scratch-resistant coating in toe and heel area // replaceable acc Wave insole (art. 3580) // metal free penetration resistance // reflective stripes

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**32268** Size 36-52

CE, EN ISO 20345:2007 S3, SRC
smooth leather black // PU/PU-outsole with high slip resistance // scratch-resistant coating in toe and heel area // replaceable acc Wave insole (art. 3580) // metal free penetration resistance // reflective stripes

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**32270** Size 36-48

CE, EN ISO 20345:2007 S3, SRC*
smooth leather black in ATEX-design // PU/PU-outsole with high slip resistance // scratch-resistant coating in toe and heel area // replaceable acc Wave insole (art. 3580) // metal free penetration resistance

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* certification submitted
31573 Size 37-48
CE, EN ISO 20347:2007 O1, FO, SRA*
smooth leather black in ATEX-design with breathable Air-Mesh textile inlays black // PU-midsole // asc - anti slip contact sole // replaceable acc Wave insole (art. 3554) // reflective stripes

31474 Size 36-47
CE, EN ISO 20345:2007 S3, SRA*
smooth leather black in ATEX-design // PU-midsole // asc - anti slip contact sole // replaceable acc Wave insole (art. 3553) // metal free penetration resistance // reflective stripes

31473 Size 36-47
CE, EN ISO 20345:2007 S1P, SRA*
smooth leather black in ATEX-design with breathable Air-Mesh textile inlays black // PU-midsole // asc - anti slip contact sole // replaceable acc Wave insole (art. 3553) // metal free penetration resistance // reflective stripes

31475 Size 36-47
CE, EN ISO 20345:2007 S3, SRA*
smooth leather black in ATEX-design // PU-midsole // asc - anti slip contact sole // replaceable acc Wave insole (art. 3553) // metal free penetration resistance // reflective stripes

Certified according to DIN EN 12568
Tested outside the shoe (200 joules)
Certified according to EN ISO 20345:2007
Tested inside footwear (200 joules)
High impact resistance
High resilience
Thermoplastic polyamide
Lighter than aluminium
50 % lighter than steel
Metal free
mcc - mono coque cap
metal free
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Printed on environmentally friendly paper.

December 2012 - Version 2

www.abeba.com

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