

Technical Data Sheet



AB-ZEROPOX® 8482 ESD

2-C-EP-ESD-hard aggregate coating



Description:

2-component epoxy coating with conductive polymeric structures and silicon carbide, coloured very low emission

Characteristics:

- in accordance with the official standards DIN EN 61340-4-1, DIN EN 61340-4-5
- tough-hard
- anti-slip
- anti-slip classification R11 (GMG 100)
- economical / cost effective
- high chemical resistance
- high mechanical resistance
- inert and harmless once cured

Application:

AB-ZEROPOX 8482 ESD is designed as an economical and anti-slip coating system for EPA area (ESD Protected Area). **AB-ZEROPOX 8482 ESD** because of its unique formulation of conductive polymers and silicon carbide, the curing process creates / develops a special and unique electrically conductive polymeric structure, which is both chemically and mechanically resistant. This flooring system can effectively prevent the build-up of electrostatic charges > 100 volt (walking test).

Test the flooring system earliest after 3 days curing time.

The entire system should be installed by only qualified applicators. For areas where enhanced **ergonomics** are required, we recommend the use of our **AB-ZEROPOX 846 ESD**; this system offers more comfort, or less stress to / on the back and ankles.

Consumption:

approx. 0.5 - 0.6 kg/m².

Resistant to:

- water / sewage
- washing agents / detergents
- saline solutions
- wet temperature max. 40°C
- solvents (please consult us)
- diluted acids and alkalis
- lubricants and fuels

Technical Data:

Mixing ratio A : B	100 : 16,5 by weight
Density (23°C)	approx. 1.90 g/cm³
Volume solids	approx. 100 %
Viscosity (23°C)	slightly thixotropic
Compressive strength (DIN EN ISO 604)	> 60 N/mm²
Shore D - hardness (DIN EN ISO 868)	approx. 80
Abrasion (1000 g / 1000 rev.) acc. to Taber	45 mg
Walking test EOS/ESD-STM 97.2 DIN EN 61340-5-1	< 100 Volt
System resistance DIN EN 61340-5-1, EOS/ESD-STM 97.1 and 97.2	< 1 x 10 ⁹ Ω
Discharge value DIN IEC 1340-4-1	< 1 x 10 ⁹ Ω

Details for application:

Pot life (15°C / 23°C / 30°C)	approx. 45 minutes / 30 minutes / 20 minutes
Substrate temperature	minimum 15°C up to maximum 30°C
Material temperature	15°C - 25°C
Maximum relative humidity of air	at 15°C: 75 % (dew point +3°C) at > 23°C: 85 % (dew point +3°C)
Curing time / foot traffic (15°C / 23°C / 30°C)	36 hours / 24 hours / 18 hours
Curing time / mech. resistance (15°C / 23°C / 30°C)	96 hours / 72 hours / 48 hours
Curing time / chem. resistance (15°C / 23°C / 30°C)	7 days / 5 days / 3 days
All above values are approximate and may be used as a guideline for specifications	

Packaging:

30 kg - pails

Colour:

pebble grey approx. RAL 7032 (other colours are available on request)
- due to raw material variations and manufacturing techniques, a slight colour / batch difference may occur -

Storage:

12 months, unopened in original drums under dry conditions and a temperature of 15 - 25°C.
At temperatures < 10°C crystallisation is possible. Please consult us.

1. Surface preparation

Prior to the application the substrate must be prepared by mechanical means using qualified equipment e.g. Blastrac® shot blasting.

Minimum requirements:

- free of cement laitance, dust, oil, fat and other contaminants
- open textured, absorbent surface
- pull off strength min. 1.5 N/mm²
- concrete residual moisture max. 4 %

Depending on the condition of the substrate the surface must be made non-porous by the application of a primer and / or key coat using **AB-ZEROPOX 803**.

On concrete surfaces where there is rising damp, residual moisture or damp concrete of maximum 6 %, AB-ZEROPOX 810 must be used.

As **AB-ZEROPOX 860 LS** is a conductive intermediate coat it must be applied evenly. Prior to the application of **AB-ZEROPOX 860 LS**, the connection to earth must be installed using spliced copper cable and controlled in accordance with its function and adhesion.

See also "general preparation and application instructions" sheet.

2. Application

Prior to mixing, the temperature of the components must be between 15 - 25°C. Mix the components in the correct ratio using a suitable low speed electric mixer (300 - 400 rpm) for at least 3 minutes or until a completely homogeneous mixture has been achieved. Put the mixed material into a clean container and mix again for at least 1 minute more. Distribute the mixture immediately onto the surface. To spread **AB-ZEROPOX 8482 ESD** ensuring an even and uniform thickness, use a special steel trowel. Scrape the material sharply over the top of the surface and finish in a crosswise manner using a suitable textured or paint-roller (nylon, 6 mm). Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

3. System description

The following figures are for ambient and surface temperatures of 15 - 23°C.

Primer:

AB-ZEROPOX 803, clear

Consumption: approx. 0.3 - 0.5 kg/m², lightly sprinkle with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m²).

Levelling coat:

AB-ZEROPOX 803 + quartz sand

Consumption: approx. 0.8 kg/m² resin plus quartz sand, no quartz sand to be sprinkled on the surface.

N/B: To achieve a premium surface and maximum conductivity, the levelling coat must be applied to the highest standards!

Connection to earth:

Must be installed and controlled by a qualified electrician (within a radius of approx. 10 m).

Conductive coating:

AB-ZEROPOX 860 LS, black

Consumption: 0.1 - max. 0.13 kg/m².

Coating:

AB-ZEROPOX 8482 ESD, pebble grey

Consumption: approx. 0.5 - 0.6 kg/m².

System thickness: 1.2 - 1.5 mm.

N/B:

In a situation where there is high mechanical wear and tear either by pedestrian / vehicle traffic, the silicon carbide within the coating will be exposed. It will appear on the surface as glittery black points.

N/B:

UV radiation cause discolouration.

4. Renovation / re-coating

The coating must be tested in accordance with the expected wear and tear, and then prepared by grinding and wet cleaning.

After the surface preparation apply a coat of **AB-ZEROPOX 860 LS** and **AB-ZEROPOX 8482 ESD**.

5. Cleaning

To clean the surface (manual or by machine) use only neutral or slightly alkaline (pH < 10) cleaning agents without preservation additives that will create a film. We highly recommend that you contact a specialist cleaning contractor.

6. Chemical resistance

Depending on the requirements we recommend to test the chemical resistance.

7. Packaging

30 kg - sets

25,75 kg component A

4,25 kg component B

8. Health and safety

GISCODE: RE30

Avoid inhalation of the vapours and contact with skin. Wear suitable protective clothing, gloves and eye / face protection. Adequate ventilation of the working area is recommended. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. When using do not eat, drink, smoke and keep away from sources of ignition. For additional references to safety-hazard warnings, regulations regarding the transport and waste management please refer to the relevant Safety Data Sheet.

9. EU Directive ("Decopaint-RL"):

Acc. to the EU Directive 2004/42/EG the maximum allowed content of VOC (Product category All / j / type SB) is 500 g/l (Limit 2010) for the ready to use product. This product is in accordance with the EU Directive 2010.

AB-ZEROPOX 8482 ESD; 1.02/10.02.22. Before use, please check that this is the actual edition of the Technical Data Sheet. The information contained in this Technical Data Sheet is of a general nature and is provided in good faith and we accept no liability for errors or omissions. Because use and application of this product are out of our control and depend, concerning substrate, load and method of application, on the particularities of the individual case, our advice, verbal, written or based on tests, does not exempt the applicator from testing the suitability of the products for the intended use.

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