Technical Data Sheet

AB-BOND® 435 AS

2-C-EP-bonding agent, antistatic

Description:

2-component epoxy trowel applied / bonding agent and jointing resin, antistatic, coloured
VOC < 500 g/l, free of nonylphenol

Characteristics:

- complies with the requirements of DIN EN 1081, DIN EN 61340-4-1
- highly fillable with special granulate AB-SG 11
- thixotropic
- very good shear / adhesive strength
- high mechanical resistance
- easy to apply
- inert and harmless once cured

Application:

AB-BOND 435 AS is an electrostatically conductive, tough hard epoxy resin adhesive for the bonding and jointing of conductive ceramic coverings (e.g. Klingenberg Kerasafe 70258 and Agrob Buchtal KerAion 2401RH-K100-01). Areas of application are e.g. laboratories, chemical industry, bottling plants, food industry, pharmaceutical industry, medical technology, paint shops, automotive industry etc. **AB-BOND 435 AS** can be used in combination with underfloor heating and at low humidity of air.

Consumption:

depending on filling degree with special granulate AB-SG 11 (up to 1 : 2 possible).

Resistant to:

- water / sewage
- diluted alkalis
- mineral oil
- saline solutions
- diluted acids
- lubricants and fuels

Technical Data:

Mixing ratio A : B	100 : 33,33 by weight (3 : 1)
Density (23°C)	approx. 1.35 g/cm³
Volume solids	approx. 100 %
Viscosity (23°C)	thixotropic
Shore D - hardness (DIN EN ISO 868)	approx. 75
Tensile strength (DIN EN ISO 178)	30 N/mm²

Details for application:

Pot life (10°C / 23°C / 30°C)	approx. 60 minutes / 45 minutes / 30 minutes
Substrate temperature	minimum 10°C up to maximum 30°C
Material temperature	15°C - 25°C
Maximum relative humidity of air	at 10°C: 75 % (dew point +3°C) at > 23°C: 85 % (dew point +3°C)
Curing time / foot traffic (10°C / 23°C / 30°C)	36 hours / 24 hours / 16 hours
Curing time / mech. resistance (10°C / 23°C / 30°C)	96 hours / 48 hours / 48 hours
All above values are approximate and may be used as a guideline for specifications	

Packaging:

12.5 kg - pails

Colour:

grey

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 tested for bearing capacity and suitability for the load to be applied. The substrate to be bonded must be in a sound condition and of a good quality in general. The surface must be clean, dry and free of oil, fat and other contaminants. Prior to the application the substrate may have to be prepared by mechanical means using qualified equipment e.g. Blastrac® shot blasting, blasting or grinding.
We recommend applying a test area.
Minimum requirements:

- free of cement laitance, dust, oil, fat and other contaminants
- stable
- pull off strength min. 1.5 N/mm²
- the substrate must be protected against the effects of rising damp and moisture mitigation!

The substrate to be coated must be in a sound condition and of a good quality. If necessary and depending on the condition of the substrate, prepare the substrate by the application of a primer and / or key coat using **AB-POX 002**, followed by a light sprinkle of clean, dry quartz sand.
On concrete surfaces where there is rising damp, residual moisture or damp concrete of maximum 6 %, AB-POX 010 must be used. Once cured, carefully remove excess sand. See also "general preparation and application instructions" sheet.

2. Connection to earth
On the prepared surface the connection to earth must be installed in accordance with the guidelines using suitable spliced copper cable or self-adhesive conductive tape. The tape must be laid in a grid of 4 x 4 m and raised from the floor area at a height of approx. 30 cm and fixed to the wall surfaces. We recommend at least one connection to equipotential bonding per 30 m² area. The connection to earth must be installed, controlled and tested by qualified electricians. We recommend that the exact details with regard to the installation of the connection to earth are decided well before the start of the application. Ensure that the connection to earth has excellent adhesion to the coating surface.

3. 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. After mixing, the tempered **special granulate AB-SG 11** must be added whilst stirring constantly. Distribute the mixture immediately onto the surface, otherwise the pot life or processing time will be significantly reduced due to exothermic reaction.

AB-BOND 435 AS is applied with a notched trowel as an even coat ensuring the desired uniform layer thickness. The conductive tiles must be laid without cavities within the open time. Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

Jointing with **AB-BOND 435 AS**
Apply the mixture of **AS-BOND 435 AS** including **AB-SG 11** in sections onto the surface and immediately afterwards apply to the joints with an epoxy board. Remove the excess material and emulsify with a little water. After emulsifying, remove the material diagonally with a sponge. Then clean the plate surface with a clean, soft sponge. Do not clean until the material is slightly tightened. Add to the cleaning water approx. 10 % spirit. If necessary (light-coloured tiles) use a suitable industrial cleaner (e.g. Ecosol 60). The suitability should be tested on a test surface. Please seek advice.

For further information:
Please refer to the work instructions of **AB-BOND 435 AS**.

4. Packaging
12.5 kg - sets
9.38 kg component A
3.12 kg component B

5. 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.

6. EU Directive ("Decopaint-RL"):
Acc. to the EU Directive 2004/42/EG the maximum allowed content of VOC (Product category AII / 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-Polymerchemie GmbH
Tjüchkampstraße 21 - 24
D - 26605 Aurich
Tel.: +49 (0)4941 - 604360
Fax.: +49 (0)4941 - 6043643
info@ab-polymerchemie.de
www.ab-polymerchemie.de