

Technical Data Sheet



AB-BOND® 431 CF

2-C-EP-bonding agent

Description:

2-component epoxy trowel applied / bonding agent, coloured, contains special fillers
VOC < 500 g/l, free of nonylphenol

Characteristics:

- good wetting characteristics
- very high shear / adhesion strength
- suitable for damp surfaces
- thixotropic
- high mechanical resistance
- high abrasion and impact resistance
- easy to apply
- easy to mix
- inert and harmless once cured

Application:

AB-BOND 431 CF is a universally applicable epoxy resin adhesive which can be used in combination with suitable, prefabricated sealing tapes as membrane sealing systems for construction joints, expansion joints, connecting joints and cracks.

Consumption:

approx. 1.6 kg/m² per 1 mm.

Resistant to:

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

Technical Data:

Mixing ratio A : B	100 : 50 by weight (2 : 1)
Density (23°C)	approx. 1.6 g/cm ³ mixture approx. 1.6 g/cm ³ (Part A), 1.6 g/cm ³ (Part B)
Volume solids	approx. 100 %
Viscosity (23°C)	thixotropic, no slump up to 20 mm
Compressive strength (DIN EN ISO 604)	approx. 55 N/mm ² (14 days / 23°C)
Tensile strength (DIN EN ISO 178)	30 - 40 N/mm ² (14 days / 23°C)
Modulus of elasticity (DIN EN ISO 527)	approx. 3500 N/mm ² (14 days / 23°C)
Linear shrinkage	< 1.0 %
Thermal expansion coefficient	approx. 45 x 10 ⁻⁶ / K
Adhesive pull off strength on concrete	Break in the concrete (14 days / 23°C)
Adhesive pull off strength on shot blasted steel	> 10 N/mm ² (14 days / 23°C)

Details for application:

Pot life (8°C / 23°C / 30°C)	approx. 90 minutes / 60 minutes / 30 minutes
Substrate temperature	minimum 8°C up to maximum 30°C
Material temperature	15°C - 25°C
Maximum relative humidity of air	at 8°C: 75 % (dew point +3°C) at > 23°C: 85 % (dew point +3°C)
Depending on the mixing intensity and the amount of air trapped during that task, the values can differ.	

Packaging:

15 kg - pails

Colour:

grey (component A white, component B dark 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

Concrete / cement screed:

Prior to the application, the substrates that are to be bonded together must be inspected and tested to assess the condition / quality. The surface must be clean, dry and free of contaminants. If necessary, prior to the application the substrate must be prepared by mechanical means using qualified equipment e. g. Blastrac® shot blasting, grit blasting or grinding.

We recommend to apply a test area.

Minimum requirements:

- free of cement laitance, dust, oil, fat and other contaminants
- stable
- pull off strength min. 1.5 N/mm²

Steel / metal:

Prior to the application the substrate must be inspected and tested to assess the condition / quality. The surface must be clean, dry and free of contaminants. If necessary, the substrate must be prepared by mechanical means using qualified equipment e. g. grinding, grit blasting or Blastrac® shot blasting in accordance with DIN ISO 12944-4, preparation grade Sa 2 ½. The bonding agent must be applied immediately after surface preparation.

We recommend applying a test area.

Minimum requirements:

- free of mill scale, rust, oil, fat, oxidised areas and any other contaminants
- stable

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 and even colour has been achieved. Put the mixed material into a clean container and mix again for at least 1 minute more. Mix the material at slow speed with a suitable spiral / can stirrer (e.g. no. 00.040.151) in order to mix in as little air as possible. Only mix as much material as can be processed within the pot life. Distribute the mixture immediately onto the surface or the reaction and exothermic temperature will reduce the pot life.

Use a notched trowel or scraper to apply **AB-BOND 431 CF** as an even coat ensuring uniform thickness. Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

AB-BOND 431 CF can be used in various ways. We recommend to apply a test area.

Waiting times:

If **AB-BOND 431 CF** is to be reworked with a suitable coating material, the freshly applied adhesive must be sprinkled with quartz sand.

N/B:

UV radiation cause discolouration.

3. Packaging

15 kg - sets

10 kg component A

5 kg component B

4. 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.

5. 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-BOND 431 CF; 2.00/07.01.19. 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.

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