

PRODUCT DATA SHEET

SikaFix®-210

Tough Polyurethane Resin for Injection Sealing and Ground Stabilization in Tunnelling and Mining

DESCRIPTION

SikaFix®-210 is a fast-reacting polyurethane based resin with short gel times and high final strength.

USES

SikaFix®-210 may only be used by experienced professionals.

SikaFix®-210 is used for permanent and durable injection sealing and ground stabilization of the headings in tunnel construction and mining. SikaFix®-210 is also used for stabilization of other loose rock faces, voids and unstable surfaces. It is suitable for injection in dry, damp and wet conditions, including sealing around water-bearing zones in rock, masonry dams and tunnel walls etc. SikaFix®-210 can be accelerated with SikaFix® AC-21 for waterstopping applications during construction works i.e. for unexpected water inrush. In situations with high water inrush and if a faster foaming action is necessary, the mixture of SikaFix®-210 and SikaFix® AC-21 can be further accelerated by the addition of SikaFix® AC-21 SF.

CHARACTERISTICS / ADVANTAGES

- High final strength
- Foaming on contact with water (~ 3 times volume increase)
- Very fast curing
- Modular system with SikaFix AC-21 and SikaFix AC-21 SF
- Easy application due to volume ratio 1:1
- High penetration ability
- Low initial viscosity
- CFC- and halogen-free
- Total solid*

* acc. to testing method of German Institute "Deutsche Bauchemie e.V."

APPROVALS / STANDARDS

German KTW drinking water certificate

PRODUCT INFORMATION

| | | |
|---------------------------|--|----------|
| Chemical Base | 2-component Polyurethane resin, solvent and CFC-free | |
| Packaging | Part A: | 20.20 kg |
| | Part B: | 24.80 kg |
| | Part A (IBC): | 980 kg |
| | Part B (IBC): | 1200 kg |
| Shelf Life | 12 months shelf life from date of production if stored properly in undamaged, unopened, original sealed packaging. | |
| Storage Conditions | Dry storage at temperatures from +5 °C up to +35 °C. Protect from direct sunlight and humidity. | |

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|--------------------|--|-------------------------------|-----------------|
| Colour | Part A: Slightly yellow Part B: Black brown | | |
| Density | Part A: ~1.01 kg/l | Part B: ~1.23 kg/l | (ISO 2811) |
| | at 23 °C | | |
| Flash Point | Part A: >140 °C | Part B: ~250 °C | (DIN 53213) |
| Viscosity | Part A: ~ 300 mPa·s | Part B: ~ 260 mPa·s | (acc. ISO 3219) |
| | At 23 °C | | |

TECHNICAL INFORMATION

| | | |
|------------------------------------|---|-----------|
| Shore A Hardness | ~80 (3 days) | (EN 868) |
| Compressive Strength | ~ 80 ±5 N/mm ² | (ISO 604) |
| Tensile Strength in Flexure | ~70 N/mm ² (3 days at 23 °C) | (ISO 178) |

APPLICATION INFORMATION

| | | |
|--------------------------------|---|---------------|
| Mixing Ratio | 1 : 1 parts by volume (refer to Application Instructions) | |
| Ambient Air Temperature | +5 °C min. / +35 °C max. | |
| Substrate Temperature | +5 °C min. / +35 °C max. | |
| Pot Life | ~ 45 seconds (at 23 °C) | (PM 10081-11) |

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LIMITATIONS

Only for application by trained and experienced professionals.

ECOLOGY HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

MIXING

- SikaFix®-210 is supplied in containers pre-batched according to the required mixing ratio of 1 : 1 parts by volume
- Both components are mixed together on injection through a 2 C-injection pump, drawing each component directly from the original containers. The static mixer must be suitable to ensure that the mixture of comp. A and B forms a stable emulsion.

- Use injection ports, lances or packers with a sufficiently large diameter and flow.

APPLICATION METHOD / TOOLS

2 component injection pumps suitable for PU-Injection. For detailed information, please refer to the corresponding method statement.

CLEANING OF TOOLS

Clean all tools and application equipment according to the Product Data Sheet for the Sika®Injection Cleaning System.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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Product Data Sheet

SikaFix®-210
November 2022, Version 02.01
020707010020000009

SikaFix-210-en-ZA-(11-2022)-2-1.pdf