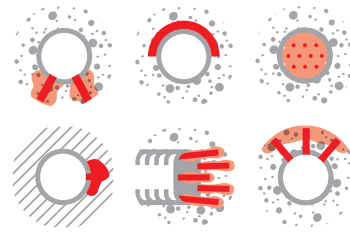


Silicate Injection Resins

WEBAC® SILfill



Range of Application

- Umbrella injection in direct TBM areas
 - Reinforcement ahead of the tunnel face and tunnel face stabilization
 - Quick filling of cavities/voids, also in mining
- Subsoil and rock mass stabilization
 - Soil solidification and stabilization in earthworks and dam building, especially in case of sandy formations
 - Slope stabilization
 - Solidification of karst and unconsolidated rock, gravel and crushed rock layers
- Sealing of foundation pits and tunnel systems

Properties

- Silicate-based injection foam resin
- High foaming factor and fine cellular structure
- No water required for foam reaction
- Suitable for cutting and planing
- Low viscosity
- Short reaction times
- Environmentally sound

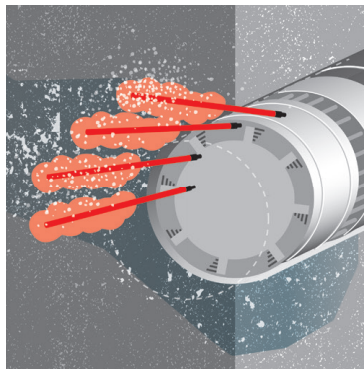
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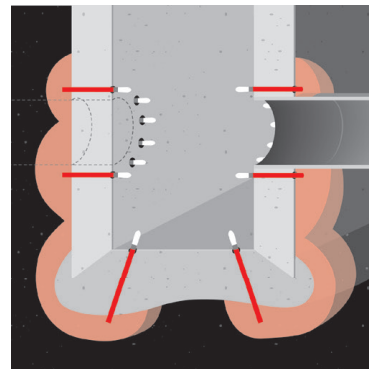
Test Certificates

- Test certificate according to KTW recommendations: D1 (large-surface sealants)
- Assessment and effects of construction products on soil and ground water according to DIBt code of practice
- Environmental Product Declaration (EPD)

Examples



Tunnel face consolidation



Water stop and volume replacement system for smaller cavities/voids

Technical Information

All the data indicated in this technical data sheet and any related information provided by our employees are of an advisory nature representing our current state of knowledge and in no way binding. As the exact chemical, technical and physical conditions of the actual application are beyond WEBAC's control, this information does not preclude examination of the products and/or procedures for the intended application and surface by the user. WEBAC is thus unable to guarantee results. The user is fully responsible for the observation of existing regulations and conditions when using the products.
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Technical Data	Values	
Mixing ratio	1 : 1 parts by volume	
Density, 23 °C (DIN ISO 2811)	Comp. A Comp. B	≈ 1.17 g/cm ³ ≈ 1.23 g/cm ³
Viscosity, 23 °C (DIN ISO 3219)	Comp. A Comp. B	≈ 150 mPa·s ≈ 180 mPa·s
Reaction time Flow limit (at continuous flow)	12 °C 23 °C 30 °C	≈ 35 s ≈ 25 s ≈ 21 s
Foam reaction Start • End • Expansion	12 °C 23 °C 30 °C	≈ 20 s • ≈ 60 s • ≈ 35-fold ≈ 10 s • ≈ 43 s • ≈ 35-fold ≈ 8 s • ≈ 35 s • ≈ 30-fold
Density measured at max. expansion in the foam interior (DIN ISO 2811)	≈ 0,015 g/cm ³	
Flashpoint (DIN ISO 2719)	Comp. A Comp. B	not determinable* ≈ 218 °C
GISCODE	PU40	
EPD	EPD-FEI-20220021-IBG1-EN	
Exposure scenarios according to REACH	Assessment of industry standard application	

* The flashpoint is not determinable due to water vapor development.
The specified data are values determined under laboratory conditions and are subject to a certain fluctuation.
Deviations are possible in practice depending on the respective object situation.

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Preparatory Work

- Check the injectability of the rock, subsoil or building structure
- Determine a remediation concept in accordance with the applicable rules and standards
- Carrying out a test injection if necessary

Application Instruction

- Injection by 2C pump
- We recommend storing the components at a minimum temperature of 15 °C for at least 12 hours prior to use to ensure optimum application performance
- Component A must be thoroughly stirred separately before application or transfer. When processing from a small container, use a slow-running stirrer at max. 300 rpm (e.g. drill with paddle stirrer), when processing from an IBC, we recommend a suitable stirring unit
- Stir component A again and again during processing
- Protect components from moisture penetration (skin formation, pump-damaging precipitates, foam formation due to moisture)
- Only use pure WEBAC material without any residues of cleaning agents or other impurity
- The reaction speed is influenced by the temperature of the material and the building structure – higher temperatures accelerate, lower temperatures slow down the reaction

Only use injection pumps for one type of material (silicate resin or polyurethane resin). When changing the material, the pump must be cleaned thoroughly and all material and cleaning agent must be removed entirely. For further information, please contact WEBAC.

WEBAC Quality Control recommends checking the product specification before processing products that have been stored for a longer period of time.

Mixing

- Components A and B are delivered at a mixing ratio of 1 : 1 from respective containers directly with a 2C pump, the components are mixed homogenously by a static mixer in the mixing head

Application

- Depending on application

We will be pleased to advise you.

Please contact us! Phone +49 40 670 57-0

Cleaning

- When interrupting work for a short period of time the mixing head can be cleaned with component A of the injection material
- When interrupting work for a longer period of time and after conclusion of the injection process it is necessary to rinse the hoses and the pistons of component A thoroughly with water, use **WEBAC® Cleaner A** for cleaning component B
- Observe the technical data sheet of the injection pump and cleaners used
- For detailed information refer to the operating manual of the injection pump

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Product Data

	Comp. A	Comp. B
Delivery form	1,120 kg 23 kg	1,200 kg 24.8 kg
Storage	<ul style="list-style-type: none"> Between 5 °C and 30 °C Protected from moisture In original, sealed containers 	

Occupational Safety

The safety regulations of the industrial trade associations and the WEBAC Safety Data Sheets are to be observed at all times when working with this product. Safety data sheets according to Regulation (EC) No. 1907/2006 (REACH) must be accessible to all persons responsible for occupational safety, health protection and the handling of materials. For further information, please see the separate information sheet "Occupational Safety" in our product catalog or www.webac-grouts.com.

Waste Disposal

In Germany, empty containers can be disposed of via "Interzero Circular Solutions Germany GmbH" observing the respective terms and conditions. It is not possible to dispose of containers at production facilities or delivery warehouses. For more detailed information, please see the separate information sheet "Disposal Notes" in our product catalog or www.webac-grouts.com and the safety data sheets.

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