

Silicate Injection Resins

WEBAC® SILform

- ▶ Compression-proof rigid silicate foam, suitable for mechanical machining, reacts with and without water contact

Range of application

- Stabilization and sealing of tunnel systems and mining installations
 - Umbrella injection in direct TBM areas
 - Reinforcement ahead of the tunnel face and tunnel face stabilization
 - Stopping of water
 - Sealing of cavities/voids and fault zones filled with water
 - Stabilizing filling of cavities/voids and gaps
- Subsoil and rock mass stabilization
 - Consolidation and stabilization in earthworks and dam building
 - Slope stabilization
 - Solidification of karst and unconsolidated rock, gravel and crushed rock layers

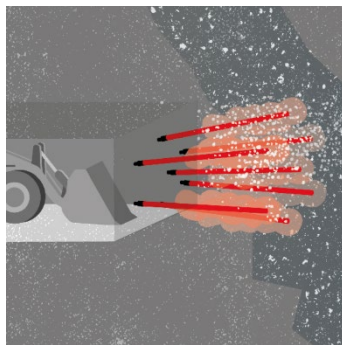
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Properties

- Fast foam and strength development
- Stable pore structure
- Good penetration
- Suitable for cutting and planing
- Reaction time and foaming activity adjustable

Example



Tunnel face consolidation

▶ Technische Information Technical Information

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Diese Technische Information soll Sie nach dem heutigen Stand unserer Kenntnisse unverbindlich informieren, hierzu erteilte Auskünfte unserer Mitarbeiter sind ebenfalls unverbindlich. Da uns die exakten chemischen, technischen und physikalischen Bedingungen der konkreten Anwendung nicht bekannt sind, befreien diese Angaben den Anwender nicht von der eigenen Prüfung der Produkte bzw. Verfahren hinsichtlich ihrer Eignung für die beabsichtigte Anwendung und stellen somit keine Zusicherung der Eignung für einen bestimmten Zweck dar. Für die Einhaltung von Vorschriften und Auflagen bei der Anwendung ist der Anwender verantwortlich. 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/73 °F (ISO 2811)	Comp. A ≈ 1.38 g/cm ³ Comp. B ≈ 1.24 g/cm ³
Application temperature Building structure and material	≥ 15 °C/59 °F
Viscosity, 23 °C/73 °F (ISO 3219)	Comp. A ≈ 250 mPa•s Comp. B ≈ 250 mPa•s
Reaction times flow limit (at continuous flow)	21 °C/70 °F ≈ 25 s
Schaumreaktion Start End Expansion	21 °C/70 °F ≈ 13 s ≈ 24 s ≈ 4-fold
Density Expansion ≈ 4-fold (ISO 2811)	≈ 0.26 g/cm ³
Flashpoint (ISO 2719)	Comp. A not determinable* Comp. B ≈ 218 °C/424 °F
GISCODE	PU40
EPD	EPD-DBC-20130016-IBG1-DE
Exposure scenarios according to REACH	Assessment of industry standard application

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.

* The flashpoint is not determinable due to water vapor development.

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Mixing

Application by 2C pump

- 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 in the mixing head



Application instruction

- We recommend storing the components at a minimum temperature of 15 °C/59 °F for at least 12 hours prior to use to ensure optimum application performance.
- Component A must be thoroughly stirred separately with a slow-running stirrer at max. 300 rpm (e.g. drill with paddle stirrer) before application or transfer.
- 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.



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 cleaners used
- For detailed information refer to the technical data sheet of the cleaner and the operating manual of the injection pump used.

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Product data	
Application	<ul style="list-style-type: none"> • Injection with 2C pump (WEBAC® IP 2K-40) • Mixing tube, Ø 8 mm, l = 500 mm
Packing	Comp. A 28.4 kg Comp. B 24.8 kg
Storage	<ul style="list-style-type: none"> • Between 5 °C/41 °F and 30 °C/86°F • Protect 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 "Interseroh Dienstleistungs 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 "Information on the disposal and return of WEBAC packaging" in our product catalog or www.webac-grouts.com and the safety data sheets.

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