

Consolidation Line

WEBAC® SILfill



Highly expanding silicate injection foam resin, suitable for mechanical machining, reacts with and without water contact.

Range of application

Suitable for tunnel construction, mining and dam building

- Temporary sealing of foundation pits and tunnel systems
 - Umbrella injection in direct TMB areas
 - Stopping of pressing water in sand, gravel and crushed rock layers
 - Reinforcement ahead of the tunnel face and tunnel face stabilization
 - Quick filling of cavities
- 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

Special properties

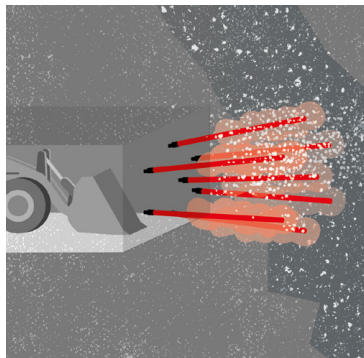
- High foaming factor and fine cellular structure
- No water required for foam reaction
- Suitable for cutting and planing
- Low viscosity
- Short reaction times
- Environmentally sound

Application

- Injection with 2C pump (e.g. **WEBAC® IP 2K-40**)
- Silicate mixing tube, Ø 8 mm, l = 500 mm
- Component A must be stirred separately and thoroughly with a low-speed mechanical stirrer at 300 rev/min. max. (e.g. drill with paddle mixer) before use or transfer to another container; ideally, component A is applied under constant agitation

Exemplary application

Meaning of the icons ► WEBAC Product Catalog, www.webac.de or www.webac-grouts.com



Tunnel face consolidation

WEBAC®

WEBAC-Chemie GmbH
Fahrenberg 22
22885 Barsbüttel
Germany
Tel. +49 40 67057-0
Fax +49 40 6703227
info@webac.de

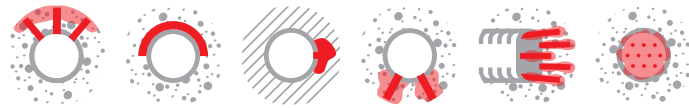
www.webac.de

► 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 parameters	Values			
Mixing ratio	1 : 1 parts by volume			
Density, 20 °C (ISO 2811)	Comp. A	1.17 g/cm ³		
	Comp. B	1.23 g/cm ³		
Viscosity, 20 °C (ISO 3219)	Comp. A	150 mPa·s		
	Comp. B	180 mPa·s		
Reaction times, 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 (ISO 2811)	0.015 g/cm ³			
Flashpoint (ISO 2719)	Comp. A	not determinable*		
	Comp. B	218 °C		

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 22885 Barsbüttel
 Germany
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 Fax +49 40 6703227
 info@webac.de

www.webac.de

* 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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General Information

WEBAC Consolidation Line

► **WEBAC Consolidation Line** comprises 2-comp. injection systems including the injection technique for large-scale technical use. The PU, silicate or hybrid resin systems are designed for stopping strong water ingress and for durably sealing and consolidating subsoil, rock mass formations and building structures, primarily in mining, dam building and tunnel construction.

- Clean the hoses and the pistons of both components with **WEBAC® Cleaner A** when using polyurethane resins.

In the case of long standstill periods of the pump the entire pump system should be filled with hydraulic fluid.

Application

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.

Application with 2C pump

- Provide for a sufficient volume flow to ensure that components A and B are mixed homogeneously in the mixing device (static mixer)
- Protect components from moisture penetration (skin formation and precipitation or foam formation due to moisture damaging the pump, especially when using PU systems)

Note: 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.

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 when using silicate resins.

Storage

- 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 "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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