

Silicate Injection Resins

WEBAC® *SILcompact M*

- ▶ Compact curing silicate injection resin, suitable for mechanical machining, high strength and adhesive power – with German Mining Approval

Range of application

- Stabilization and permanent sealing of tunnel systems and mining installations
 - Umbrella injection in direct TMB areas
 - Reinforcement ahead of the tunnel face and tunnel face stabilization
 - Filling of cavities 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

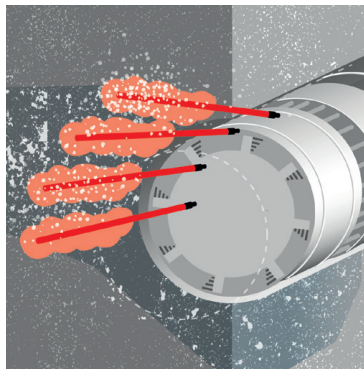
WEBAC-Chemie GmbH
Fahrenberg 22
22885 Barsbüttel
Germany
Tel. +49 40 67057-0
Fax +49 40 6703227
info@webac.de

www.webac.de

Properties

- German Mining Approval (LOBA E 62.12.22.67-2011-1)
- Good flow properties
- Fast strength development
- No foam formation even under water
- Low reaction temperature
- Suitable for cutting and planing
- Adjustable reaction time

Example



Tunnel face pre-injection

▶ 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.
© WEBAC-Chemie GmbH. Version 03/2020

Silicate Injection Resins

WEBAC® *SILcompact M*

Technical parameters	Values	
Mixing ratio	1 : 1 parts by volume	
Density, 23 °C / 73 °F (ISO 2811)	Comp. A	≈ 1.46 g/cm ³
	Comp. B	≈ 1.2 g/cm ³
Application temperature Building component and material	≥ 15 °C / 59 °F	
Viscosity, 25 °C / 77 °F (ISO 3219)	Comp. A	≈ 290 mPa·s
	Comp. B	≈ 390 mPa·s
Reaction Time Flow limit • tack-free • solid	20 °C / 68 °F ≈ 120 s • ≈ 180 s • ≈ 240 s	
Compressive strength, uniaxial 21 °C / 70 °F (ISO 604)	< 24 h	≈ 40–50 MPa (N/mm ²)
	6 d	≈ 50 MPa (N/mm ²)
Bending tensile strength 21 °C / 70 °F (ISO 178)	6 d	≈ 23 MPa (N/mm ²)
Tensile strength, 21 °C / 70 °F (ISO 527)	6 d	≈ 10 MPa (N/mm ²)
Shore hardness D, 20 °C / 68 °F (ISO 386)	1 h	≈ 60
	24 h	≈ 70
Heat development, 30 °C / 86 °F**	max. 103 °C / 217 °F	
Density, cured material (ISO 2811)	≈ 1.25 g/cm ³	
Bonding strength (based on EN 196)	24 h	≈ 3.5 MPa (N/mm ²)
Ultimate strength, < 30 °C / 86 °F (based on EN 196)	Bonding strength ≥ 1 MPa (N/mm ²)	
Flashpoint (ISO 2719)	Comp. A	not determinable*
	Comp. B	≈ 200 °C / 392 °F
GISCODE	PU40	
EPD	EPD-DBC-20130016-IBG1-DE	
Exposure scenarios according to REACH	Assessment of industry standard application	

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

** free temperature development with 200 g of material

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.

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.
© WEBAC-Chemie GmbH. Version 03/2020

Silicate Injection Resins

WEBAC® *SILcompact M*



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

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.
© WEBAC-Chemie GmbH. Version 03/2020

Silicate Injection Resins

WEBAC® *SILcompact M*

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 1,360 kg 29 kg	Comp. B 1,100 kg 23.5 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 	

Test certificates

- German Mining Approval (LOBA E 62.12.22.67-2011-1)
- Test certificate (for drinking water) according to KTW recommendations (German Federal Health Gazette): B (repair system for containers)
- Assessment and effects of construction products on soil and ground water according to DIBt code of practice

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.

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.

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.
 © WEBAC-Chemie GmbH. Version 03/2020