Consolidation Line

WEBAC® PURseal

Fast curing, very high (early) strength PU resin which can also be modified into an extremely fast reacting rigid foam by using accelerators and additives

Range of application

Suitable for tunnel construction, mining and dam building

- Securing of foundation pits and tunnel systems
  - Quick stopping of and durable sealing against flowing water
  - Stabilization and connection of tubbings to rock mass
- Subsoil and rock mass stabilization
  - Soil solidification and stabilization in earthworks and dam building
  - Slope stabilization
  - Solidification of karst and unconsolidated rock, gravel and crushed rock layers
- Anchor bonding for rock reinforcement

Special properties

- Cures without water contact to form a pore-free, compact and high strength material
- Fast curing – permanent sealing
- Environmentally sustainable

Product modifications

- Reaction time and foaming activity adjustable (ACC3 and SF)
- Special modifications with approvals for mining applications (M) and injection work in contact to soil and ground water (M S)
- Slow reaction versions (SL5 or SL10)

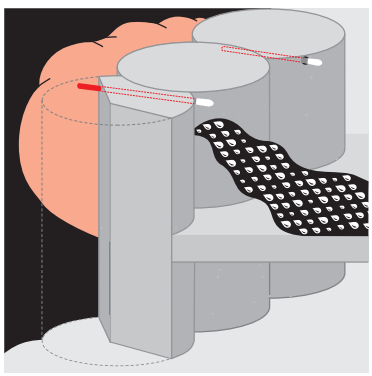
Application

- Injection with 2C pump (e.g. **WEBAC® IP 2K-F2/WEBAC® IP 2K-40**)
- PU mixing tube, Ø 12 mm, l = 300 mm

Exemplary application

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

Consolidation and sealing



Sealing of foundation pits

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Technical Information

Consolidation Line

WEBAC® PURseal

Technical parameters

	Values	
Mixing ratio		1 : 1 parts by volume
Density, 23 °C (ISO 2811)	Comp. A Comp. B	1.01 g/cm³ 1.23 g/cm³
Viscosity, 23 °C (ISO 3219)	Comp. A Comp. B	300 mPa·s 260 mPa·s
Reaction time Flow limit · solid	23 °C	40 s · 60 s
Expansion in contact with water (5 %), 23 °C		3–4 times
Shore hardness D, 21 °C (ISO 868)	3 d	73/65
Compressive strength uniaxial, 21 °C (ISO 604)	3 d	80 MPa (N/mm²)
Bond strength bar anchor Ø 32 mm, 0.5 m fixed in a hole Ø 50 mm	15 min after injection	No pull-out up to maximum load 3.2 MN
Flashpoint (ISO 2719)	Comp. A Comp. B	> 140 °C > 250 °C

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.

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 homogenously 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.
- 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.

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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