PU Injection Resins

WEBAC® 1403

Range of application

- Damp proof course (dpc) in masonry
- Sealing of joint tapes
- Seepages in concrete
- Sealing of construction joints (waterproofing of gravel nests/ honey combs) and connection joints of precast walls
- Sealing of foundation pits
- Sealing injection in open-pored concrete structures (e.g. tamped concrete)

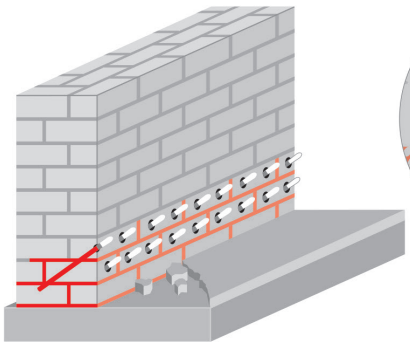
Properties

- Polyurethan-based injection resin
- Closed-cell and permanently dense pore structure
- Slight foam formation upon contact with water
- Capillary obstruction, solidifying
- Low viscosity
- Adjustable reaction time (accelerator **WEBAC® B14**)
- With accelerator also suitable for use at low temperatures
- Total solid*

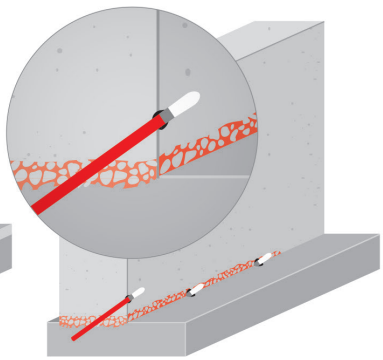
Test certificates

- Test certificate according to KTW-BWGL recommendations: sealants, lubricants
- Test certificate according to KTW recommendations: D2 (other seals and adhesives)
- Test Report on the efficiency as injection material for post-construction damp proof courses (dpc) against pressing moisture in masonry (BuFAS Engineer's Bulletin)
- Test Report on the efficiency as injection material for post-construction damp proof courses(dpc) against capillary rising moisture in masonry (BuFAS Engineer's Bulletin)
- Environmental Product Declaration (EPD)
- List of chemical resistance

Examples



Damp proof course (dpc) in masonry



Sealing of construction joints

*according to test method by Deutsche Bauchemie e.V. (German Industry Association for Manufacturers of Construction Chemicals)

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

www.webac.de

Technisches Merkblatt

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Technical data

Technical data		Values		
Mixing ratio		1 : 1 parts by volume		
Density, 20 °C (DIN ISO 2811)	**Comp. A** **Comp. B**	≈ 1.0 g/cm³ ≈ 1.1 g/cm³		
Pot life (WEBAC test specification based on DIN ISO 9514)		**30 °C** ≈ 60 min	**23 °C** ≈ 90 min	**12 °C** ≈ 240 min
Application temperature Building structure and material		> 5 °C		
Viscosity of mixture (WEBAC test specification based on DIN ISO 3219)		**30 °C** ≈ 65 mPa·s	**23 °C** ≈ 80 mPa·s	**12 °C** ≈ 155 mPa·s
Reaction time with 5% water Start · End · Expansion		**21 °C** ≈ 2 min · ≈ 5 min 30 s · ≈ 5-times		
Tear strength · Elongation at break 7 d, 21 °C (DIN ISO 527)		≈ 0.7 MPa (N/mm²) · ≈ 50%		
Shore hardness A 7 d, 21 °C (DIN EN 868)		≈ 48/43		
Watertightness (DIN EN 14068)		< 2 bar		
Fire behavior (DIN 4102-4. 2.3.2)		B2		
GISCODE		PU40		
EPD		EPD-FEI-20220021-IBG1-EN		
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.

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Preparatory work

Structural analysis:

- Preparation of a building condition analysis to determine the actual condition of the structure/component
  - Structure condition
  - Hydrodynamic and hydrostatic conditions
  - Water load
  - Salt load
- Determine the necessary key figures for soil injections (soil expertise/porosity etc.)

This results in:

- Planning of suitable remediation measures in accordance with the applicable rules and standards
- Selection of suitable material
- Selection of packers/lances
- Arrangement of the boreholes and placement of the packers/lances
- Carrying out a test injection if necessary

Application instruction

- Injection by 1C or 2C pump
- Make sure the filter in the hopper is clean
- The mixture must be used completely within pot life
- 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

Mixing

Application by 1C pump

- Empty component A and B at the given mixing ratio into a mixing vessel (make sure that the containers are completely empty) and mix homogenously
- Transfer mixed material in a new mixing vessel, stir well again and fill into the hopper of the pump

Application by 2C pump

- Fill component A and B into the respective hoppers
- The components are mixed homogenously in the mixing head

Application

- Adapt the injection pressure to the nature and condition of the building structure (< 10 bar for low pressure method or high pressure method starting at ≈ 20 bar)
- Continue the injection until resin leaks out from the masonry and/or from the adjacent packers. This is necessary to get an even material distribution
- A secondary injection must be carried out depending on the moisture condition and foam behavior

Final work and cleaning

- Once the material has cured remove the packers
- Clean the drill holes and close with suitable non-shrinking mortar
- Clean the component surface of patched cracks, grind flat if necessary
- Clean the pump with **WEBAC® Cleaner A**
- Use **WEBAC® Cleaner B** for dissolving cured material but never for flushing pumps
- 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

Material consumption for post-construction damp proof course (dpc) (depending on the pore and cavity volume of the masonry)	• Thumb rule: ≈ 1 kg/m per 10 cm wall thickness • For masonry with wall thickness > 60 cm: ≈ 1.2 kg/m per 10 cm wall thickness	
Delivery form	**Comp. A** 198 kg 19.8 kg 9.75 kg 5 kg 1 kg	**Comp. B** 217 kg 21.8 kg 10.75 kg 5.5 kg 1.1 kg
Storage	• Between 5 °C and 30 °C • Protected from moisture • In original, sealed containers	
Compatibility	• Compatible with masonry mortar, concrete, steel, foil, cable sheathing, metal and WEBAC injection materials	
Resistance	• Resistant to salts harmful to the building, alkalis and acids in common concentrations in building structures	

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.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.com and the safety data sheets.

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