

WEBAC®4170T

Low Temperature Epoxy Injection Resin

Injection System

Properties

WEBAC.4170T is a highly reactive special EP injection resin characterized by its low viscosity even at low temperatures. Its low viscosity and good moisture compatibility provide optimum distribution of the material, a good wetting effect and a firm anchorage to dry, moist and wet mineral crack borders.

The material's pot life (1 liter) amounts to approx. 25 minutes at +20 °C. The material quantity and layer thickness influence the curing time: high temperatures accelerate, low temperatures slow down the material's strength development, especially if applied in thin layers. Mixture with water during the injection into damp or wet cracks may accelerate the reaction. WEBAC.4170T is suitable for use if the temperature of the structural components and the ambient temperature is over +5 °C.

Mixing

The containers are provided according to the required mixing ratio of 3:1 parts by volume. Partial quantities can be measured out in separate vessels by the user.

Empty components A and B into a mixing vessel and mix until homogeneous, observing the safety precautions (ensure that the containers are completely empty). Mix both components thoroughly and without bubble formation with a low-speed mechanical stirrer (300 rev/min. max.) for at least 3 minutes to obtain an intense, homogenous mixture. Make sure that the material in the wall and bottom areas is also mixed in thoroughly. After mixing, fill the material into a second, clean vessel, stir briefly and use within the pot life.

Application

Apply WEBAC.4170T by means of a single-comp. pump (see WEBAC. Injection Pumps). Make sure that only pure WEBAC.4170T without any residue from cleaning agents or other foreign matter is injected. The injection pressure depends on the nature of the building. Start the injection by filling the lowest crack areas first. In case of horizontal cracks, carry out the injection from one side in order to avoid air inclusions. When injecting the last packer check the air vent for emerging resin. A secondary injection should be carried out during the gelling phase of the material. The material's pot life may be reduced due to the inherent heat of the injection pump. As soon as the material in the pump's feed container heats up it must be either used immediately or be removed from the pump.

Note

Once the pot life has elapsed, the material cures very quickly along with strong heat and smoke development. Therefore, only mix that amount of material which can be applied within the specified pot life.

Range of application



WEBAC.4170T is designed for the closing, sealing and bonding of dry, damp and water-bearing cracks and cavities without hydrostatic pressure at low temperatures.

Type of material

- 2-comp. epoxy resin
- Low-temperature injection resin
- Moisture compatible
- Very low viscosity
- total solid*

Cleaning agent

Clean the equipment thoroughly with WEBAC® Cleaner A any time work is interrupted for a longer period of time and after use. Use WEBAC® Cleaner B for etching all material already cured (not suitable for rinsing pumps). Provide for adequate ventilation during the cleaning process. Use WEBAC® Lubricant in case of long standstill periods.

Storage

Store WEBAC.4170 at +8 °C to +25 °C in original, sealed containers protected from moisture.

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

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Waste disposal

Empty containers can be disposed of via the German Interseroh AG observing all the relevant terms and conditions. It is not possible to dispose of containers at production facilities or delivery warehouses.

For information on the disposal of residual material and empty containers, see the separate code of practice in the Annex to the **WEBAC® Product Catalog** and the safety data sheets.

Safety precautions

The safety regulations of the industrial trade associations and the **WEBAC®** safety data sheets are to be observed at all times when working with **WEBAC.4170T**.

In accordance with Regulation 1907/2006/EC (Annex II) the safety data sheets must be accessible to all persons responsible for occupational safety, health protection and the handling of materials.
GISCODE RE 1

Wear protective clothing, safety gloves and goggles during the application of the material and when cleaning the equipment.

The use of a suitable skin care cream is recommended. In case of contact with skin wash with soap and water. In case of contact with eyes rinse immediately with an eye bath of water and seek medical advice at once.

Do not allow the unmixed material to enter drains or soil.

Technical data		
Type of material	2-comp. epoxy injection resin, CFC-free, total solid*	
	Comp. A:	Comp. B:
Density (+ 20 °C)	approx. 1.1 g/cm ³	approx. 0.9 g/cm ³
Color**	transparent (slightly yellow)	
Viscosity of mixture (+ 23 °C)	approx. 100 mPa·s	
Mixing ratio	3 : 1 parts by volume	
Pot life (1 l, + 23 °C)	approx. 25 min	
Application temperature	> + 5 °C (building component, material)	
Application	injection with a 1-c-pump	
Curing time	16 h – 3 days (+ 20 °C – + 5 °C) (the material's strength still increases after the specified time, especially at low temperatures)	
Compressive strength	approx. 65 N/mm ²	
Tensile strength	approx. 42 N/mm ²	
Storage	at +5 °C to +30 °C in original, sealed containers protected against moisture	
The given data are laboratory parameters and may deviate depending on the object and the conditions on site.		

* according to test method of Deutsche Bauchemie e.V.

** color may vary