Epoxy Injection Resins WEBAC_® 4170T CE



• WEBAC_• 4170T is a CE-certified low viscosity epoxy injection resin suitable for various crack conditions, also at low temperatures.

Range of application	 Structural filling of cracks and cavities/voids in concrete according to EN 1504-5 (CE-Declaration of Performance/2+) Repair of foundations in wind power plants Repair of oil-contaminated and damp cracks
Properties	 Suitable at low temperatures Very low viscosity Suitable for damp and oily crack edges Good adhesion Total solid*

Examples



Repair of foundations in wind power plants



Repair of oil-contaminated cracks

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

Technical Information

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Technical data	Values 3 : 1 parts by volume				
Mixing ratio					
Density, 20 °C / 68 °F (ISO 2811)	Comp. A Comp. B	≈ 1.1 g/cm ³ ≈ 0.96 g/cm ³			
Pot life		30 °C / 86 °F ≈ 10 min	20 °C / 68 °F ≈ 20 min	<mark>12 °C / 54 °F</mark> ≈ 60 min	
Application temperature Building structure and material		> 3 °C / 37 °F			
Viscosity of mixture		30 °C / 86 °F ≈ 80 mPa·s	23 °C / 73 °F ≈ 110 mPa·s	12 °C / 54 °F ≈ 230 mPa·s	WEBAC-Chemie Gr Fahrenberg 22 22885 Barsbüttel - Germany
Tensile strength on concrete 14 d, 21 °C / 70 °F (EN 12618-2)	dry wet	≈ 3.8 N/mm² ≈ 3.5 N/mm²			Tel. +49 40 67057-0 Fax +49 40 6703222 info@webac.de
Compressive strength 7 d, 21 °C / 70 °F (ISO 604)		≈ 80 N/mm²			www.webac.
Bending tensile strength 7 d, 21 °C / 70 °F (ISO 178)	≈ 100 N/mm²				
Tensile strength • elongation at break 7 d, 21 °C / 70 °F (ISO 527)	≈ 35 N/mm² • ≈ 2.5%			_	
E modulus 7 d, 21 °C / 70 °F (ISO 527)	≈ 2,100 N/mm²			_	
Glass transition temperature $T_{\rm G}$	> 40 °C / 104 °F			_	
Shore hardness D 7 d, 21 °C / 70 °F (EN 868)	≈ 75/72				
CE classification (EN 1504-5)	U(F1) W(1) (1/3) (5/30)				
Fire behavior	B2 according to DIN 4102-4. 2.3.2			_	
GISCODE	RE1			_	
EPD	EPD-DBC-20130021-IBE1-DE				
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.

Technical Information

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Preparatory work

See WEBAC Brochure Crack Repair



Crack Repair



Application by 1C pump

- Empty component A and B at the given mixing ratio into a bucket (make sure that the containers are completely empty) and mix homogenously
- Transfer the mixed material to the hopper

Strong heat development – only mix small quantities!

I Application instruction

- The mixture must be used completely within the specified pot life
- Make sure the filter in the hopper is clean
- 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

Due to the heat development of the injection pump, the pot life of the material may be reduced. Once the material is noticeable warm, it must either be used immediately or removed from the hopper and pump.

Application

- The injection pressure depends on the nature and condition of the structure, start the injection by filling the lowest crack areas first
- In the case of horizontal cracks, carry out the injection from one side in order to avoid air inclusions
- Continue the injection until resin leaks out from the adjacent packers. This is necessary to get an even material distribution
- When injecting the last packer check the ventilation hole for apparent resin
- A secondary injection must be carried out within the gelling phase of the material (up to approx. 30 min after end of the pot life)

Final work and cleaning

- The patching can be removed as soon as the injection process is completed and the filling material is cured
- Close the drill holes with suitable non-shrinking mortar and re-profile the surface
- Clean the pump with WEBAC. Cleaner A
- Use **WEBAC**. **Cleaner B** for dissolving cured material but never for flushing pumps
- Observe the technical data sheets of the injection pump and cleaners used
- For detailed information refer to the operating manual of the injection pump used

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• Technical Information

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Product data			
Application	 Injection by 1C pump Strong heat development – only mix small quantities! 		
Packing	Comp. A 16.85 kg 10 kg 3 kg 1 kg	Comp. B 4.8 kg 2.9 kg 0.86 kg 0.29 kg	
Storage	 Between 8 °C / 46 °F and 25 °C / 77 °F Protect from moisture In original, sealed containers 		
Compatibility/Resistance	 Compatible with concrete, steel, foil, cable sheathing and WEBAC injection materials Resistant to harmful salts, alkalis and acids 		

Test certificates

- Declaration of performance according to Construction Products Regulation
- Test certificate^{*} according to KTW recommendations: D1 (large-surface sealants)

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.webacgrouts.com.

* for drinking water

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

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