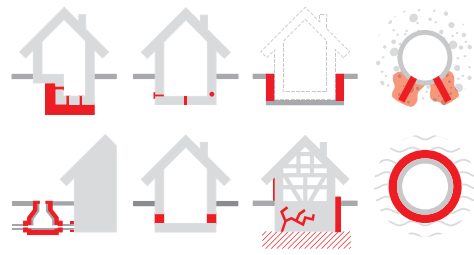


Injection Gels

WEBAC® 240 CE* U



- WEBAC® 240 is a polyacrylate gel for sealing building structures and joints, specially suitable for curtain injections. Due to a multifunctional modular system various applications are possible.

Range of application

WEBAC. 240

- Curtain injection
- Stabilization and sealing of foundation soil
- Damp proof course (dpc)
- Backfilling of joints
- Construction sealing of buildings
- Micro tunneling

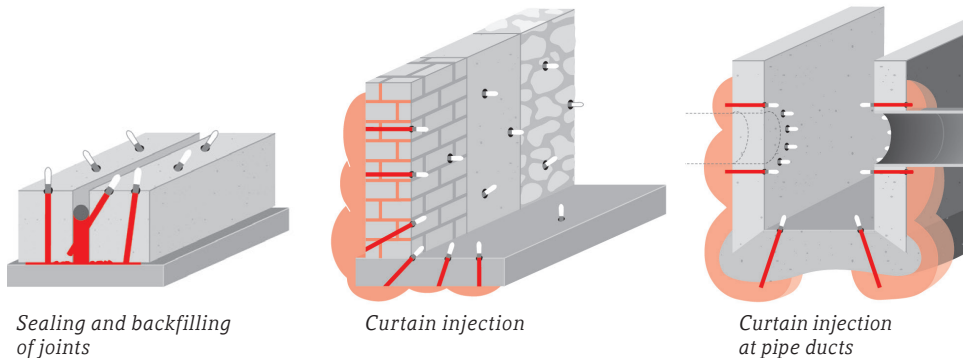
WEBAC. 240 + Bseal I

- Repair of damaged web and foil sealings
 - With ground contact
 - In tunnels, sewers, shafts, bridges and basements
- Sealing of annular gaps and voids in tubbing constructions
- Backfilling of joints
- Sealing joints with permanent contact to water

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Examples



Sealing and backfilling of joints

Curtain injection

Curtain injection at pipe ducts

*CE Declaration of Performance 1504-5 for swellable filling with WEBAC. 240 + Bseal I

Technical Information

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Injection Gels

WEBAC® 240 **CE*** 

Properties

WEBAC® 240

- Solid yet elastic, absorbs dynamic and mechanical stress
- Adjustable reaction
- Swells upon contact with water
- Economical material consumption
- Chloride-free
- Environmentally friendly

WEBAC® 240 + Bseal I **CE***

- Polymer-reinforced
- Excellent adhesion to dry, damp and wet substrates as well as membranes and foils
- High dimensional stability
- Limited swelling
- Neglected volume loss during the drying process
- Salt reduced

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*at 2% B-concentration

► Technical Information

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Injection Gels

WEBAC® 240 CE* U

Technical data

Technical data		WEBAC® 240		
Mixing ratio		Comp. A A1 : A2 20 : 1 parts by weight	Comp. B water : B-powder-concentrate 98 : 2 parts by weight	
		A : B 1 : 1 parts by volume		
Density, 20 °C / 68 °F (ISO 2811)	Comp. A1 Comp. A2 Comp. B	≈ 1.2 g/cm³ ≈ 0.95 g/cm³ ≈ 1.0 g/cm³		
Application temperature Building structure and material	> 1 °C / 34 °F			
Viscosity of mixture		30 °C / 86 °F ≈ 4 mPa·s	23 °C / 73 °F ≈ 6 mPa·s	12 °C / 54 °F ≈ 10 mPa·s
Reaction time at 2% B-concentration flow limit • solid		30 °C / 86 °F ≈ 20 s • ≈ 40 s	20 °C / 68 °F ≈ 40 s • ≈ 75 s	10 °C / 50 °F ≈ 100 s • ≈ 180 s
Tear strength • elongation at break 24 h (in foil), 21 °C / 70 °F (ISO 527)	≈ 0.06 N/mm² • ≈ 220%			
Watertightness (EN 14068)	> 2 bar			
Fire behavior test (DIN 4102)	B2 according to DIN 4102-1. 6.2			
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.^a

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*CE Declaration of Performance 1504-S for swellable filling with WEBAC® 240 + Bseal I

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Injection Gels

WEBAC® 240  

Technical data

		WEBAC® 240						
			5 °C 41 °F	10 °C 50 °F	15 °C 59 °F	20 °C 68 °F	25 °C 77 °F	30 °C 86 °F
		B-concentration						
flow limit		0.5%	≈ 420 s	≈ 340 s	≈ 185 s	≈ 120 s	≈ 78 s	≈ 63 s
		1.0%	≈ 250 s	≈ 185 s	≈ 102 s	≈ 70 s	≈ 44 s	≈ 34 s
		1.5%	≈ 165 s	≈ 125 s	≈ 72 s	≈ 48 s	≈ 35 s	≈ 23 s
		2.0%*	≈ 135 s	≈ 100 s	≈ 60 s	≈ 40 s	≈ 27 s	≈ 19 s
		2.5%	≈ 120 s	≈ 90 s	≈ 50 s	≈ 33 s	≈ 23 s	≈ 16 s
		5.0%	≈ 65 s	≈ 50 s	≈ 29 s	≈ 20 s	≈ 15 s	≈ 9 s
Reaction times			5 °C 41 °F	10 °C 50 °F	15 °C 59 °F	20 °C 68 °F	25 °C 77 °F	30 °C 86 °F
		B-concentration						
solid		0.5%	≈ 660 s	≈ 540 s	≈ 330 s	≈ 195 s	≈ 140 s	≈ 110 s
		1.0%	≈ 390 s	≈ 300 s	≈ 200 s	≈ 130 s	≈ 85 s	≈ 70 s
		1.5%	≈ 270 s	≈ 210 s	≈ 140 s	≈ 90 s	≈ 70 s	≈ 45 s
		2.0%*	≈ 220 s	≈ 180 s	≈ 120 s	≈ 75 s	≈ 55 s	≈ 40 s
		2.5%	≈ 195 s	≈ 155 s	≈ 100 s	≈ 60 s	≈ 48 s	≈ 35 s
		5.0%	≈ 110 s	≈ 95 s	≈ 60 s	≈ 40 s	≈ 36 s	≈ 27 s

*National Technical Approval according to DIBt

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Injection Gels

WEBAC® 240 CE* U

Technical data		WEBAC® 240 + Bseal I	
Mixing ratio		A1 : A2 = 20 : 1 parts by weight A : B = 1 : 1 parts by volume	
Density, 20 °C / 68 °F		≈ 1 g/cm³	
Viscosity of mixture		23 °C / 73 °F ≈ 35 mPa·s	12 °C / 54 °F ≈ 40 mPa·s
Reaction time (100 ml mixture)	flow limit	B-powder-concentration in Bseal I	
		2.0% (≥ 0.4 kg)	
		5 °C / 41 °F 10 °C / 50 °F 20 °C / 68 °F	≈ 125 s ≈ 83 s ≈ 36 s
	solid	2.0% (≥ 0.4 kg)	
		5 °C / 41 °F 10 °C / 50 °F 20 °C / 68 °F	≈ 180 s ≈ 110 s ≈ 46 s
Tear strength • elongation at break 24 h (in foil), 21 °C / 70 °F (ISO 527)		≈ 0.2 N/mm² • ≈ 450%	
CE classification (EN 1504-5)		U(S2) W(1) (1/2/3) (5/30)	

*CE Declaration of Performance 1504-5 for swellable filling with WEBAC® 240 + Bseal I

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Injection Gels

WEBAC® 240



Preparatory work

- See **WEBAC Brochure Curtain Injection**



Curtain Injection



Mixing

Mixing of component A

- The containers of component A are provided according to the required mixing ratio
- Empty the smaller container of component A2 completely into the larger container of component A1
- Mix both components via stirring while pouring until homogeneous

Mixing of component B

WEBAC® 240

- Dissolve B-powder-concentrate in clean tap water in a clean plastic bucket similar to the container of component A1 by thoroughly stirring it with a stainless steel stirrer (adapt the filling level of component B to that of component A)

WEBAC® 240 + Bseal I

- Add the B-powder-concentrate to the container of component Bseal I and stir until it has fully dissolved
- Prepared components A and B are delivered at a mixing ratio of 1 : 1 from respective containers directly with a 2C pump (stainless steel)
- The components are mixed homogeneously in the mixing head



Application instruction

- Only use stainless steel or wooden stirrer for mixing
- All prepared components must be used immediately
- 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

Coloring

- WEBAC Injection Gels can be colored with **WEBAC® F200** to monitor the water displacement, the material distribution as well as to identify any gel leakage
- To color the injection gel, mix approx. 1% (referring to **component A**) of the blue color agent **WEBAC® F200** into **component A**
- The color intensity of the gel will decrease gradually

Due to the high adhesive power of component B of **WEBAC® 240 + Bseal I** the filter of the suction hose must be regularly checked for material residues and lumps and be cleaned if necessary when applying large quantities. Upon completion of the injection process, the 2C pump must be thoroughly rinsed with plenty of water (at least 20 liters of fresh, clean water per component) to prevent clogging within the pump system and the suction hoses.

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Injection Gels

WEBAC® 240 CE* U



Application

Application by 2C pump (stainless steel)

- The injection pressure depends on the nature and condition of the structure
 - Inject the injection gel from bottom to top, beginning at the lowest drill hole level
 - Continue the injection until injection gel starts leaking from the adjacent packers
- For detailed information, refer to the **WEBAC Brochure Curtain Injection**



Curtain Injection



Final work and cleaning

- The packers can be removed immediately after gel formation
- Cured gel must be removed from the drill holes/drill hole walls down to about 10 cm deep and the drill holes must be filled
- Preferably use pcc mortar for concrete and quick set mortar for masonry
- Clean the injection pump and the equipment exclusively with water
- Gelled residues must be removed from the equipment mechanically immediately after use
- Observe the technical data sheet and the manual of the injection pump used



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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*CE Declaration of Performance 1504-S for swellable filling with WEBAC® 240 + Bseal I

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Injection Gels

WEBAC® 240 CE* U

Product data

Application	• Injection by 2C pump (stainless steel)					
Material consumption (orientation value)	Curtain injection	20 – 60 kg/m ² (corresponds ≈ 10–30 kg gel-concentrate)				
	Sealing of building	≈ 20 kg/m ² at 50 cm wall thickness				
	Damp proof course (dpc)	1.5–2 kg/m per 10 cm wall thickness				
Packing	WEBAC® 240	Comp. A1 21.5 kg	Comp. A2 1.05 kg	Comp. B 1.0 kg 0.4 kg 0.2 kg	Comp. Bseal I 20 kg	
	WEBAC® F200	Unit 1 kg				
Storage/Transport	<ul style="list-style-type: none">• Between 5 °C / 41 °F and 25 °C / 77 °F• Protect component Bseal I of WEBAC® 240 from frost• Protect from moisture and light• In original, sealed containers					
Compatibility/Resistance	<ul style="list-style-type: none">• Resistant to diluted acids and salts damaging the structure• Resistant to alternating frost and thaw• Reacted gels are insoluble in water and fuels					

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Test certificates

WEBAC® 240

- National Technical Approval: Injection gel for curtain injection
- Certificate of Conformity for use as: Curtain injections
- Test certificate* according to KTW recommendations: D1 (large-surface sealants)

WEBAC® 240 + Bseal I

- Declaration of Performance according to Construction Products Regulation
- Test certificate* according to KTW recommendations: D1/D2 (large-surface sealants/ other sealants and adhesives)

* for drinking water

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