Injection Gels

WEBAC® 270

▸ WEBAC® 270 is a low viscosity, elastic polyacrylate gel with an adjustable reaction time.

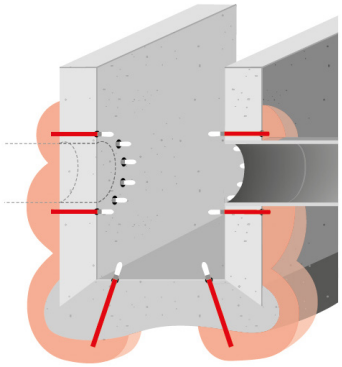
Range of application

- Backfilling of joints
- Sealing of construction joints
- Stabilization and sealing of foundation soil
- Construction sealing of buildings

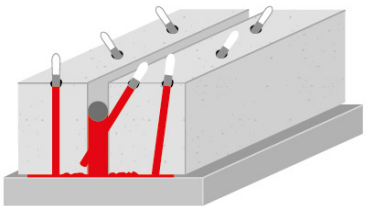
Properties

- Low viscosity
- Adjustable reaction time
- Neglected volume loss during the drying process
- High resistance also in alcaline and salt-loaded areas
- Solid yet elastic, absorbs dynamic and mechanical stress

Examples



Curtain injection at pipe ducts



Sealing and backfilling of joints

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

www.webac.de

Technical Information

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Technical data

	Values									
Mixing ratio	**Comp. A = A1 + A2** 10 : 1 parts by weight		**Comp. B = Water : B powder-concentrate** 99.5 : 0.5 parts by weight							
	A : B = 1 : 1 parts by volume									
Density	**Comp. A1** ≈ 1.06 g/cm³ **Comp. A2** ≈ 0.94 g/cm³ **Comp. B** ≈ 1.0 g/cm³									
Application temperature Building structure and material	> 5 °C									
Viscosity of mixture			**5 °C** ≈ 5.8 mPa·s		**21 °C** ≈ 3.5 mPa·s			**35 °C** ≈ 3.2 mPa·s		
Reaction times with variable A2 concentration at 0.5% B-concentration	**A2**	**ml or g**		**water**	**5 °C**	**10 °C**	**15 °C**	**20 °C**	**25 °C**	**30 °C**	**35 °C**
flow limit	100 %	1,968 ml	1,850 g	0 ml≙g	7:00	6:00	3:40	2:40	2:20	2:00	1:40
	90 %	1,771 ml	1,665 g	197 ml≙g	9:30	8:20	4:25	3:05	2:45	2:15	2:00
	80 %	1,574 ml	1,480 g	394 ml≙g	20:00	12:35	5:40	3:15	2:55	2:25	2:10
	70 %	1,378 ml	1,295 g	590 ml≙g	23:15	15:40	6:30	3:30	3:10	2:40	2:15
	60 %	1,181 ml	1,110 g	787 ml≙g	-	34:45	7:20	3:55	3:40	3:00	2:20
	50 %	984 ml	925 g	984 ml≙g	-	-	7:55	4:15	4:05	3:25	2:25
	40 %	787 ml	740 g	1,181 ml≙g	-	-	13:00	5:15	4:50	4:00	2:40
	30 %	590 ml	555 g	1,378 ml≙g	-	-	32:00	6:30	5:50	4:45	3:25
	20 %	394 ml	370 g	1,574 ml≙g	-	-	-	10:50	6:25	5:40	4:35
	10 %	197 ml	185 g	1,771 ml≙g	-	-	-	30:30	21:50	15:00	9:40
	5 %	98 ml	93 g	1,870 ml≙g	-	-	-	-	-	-	15:00
solid	100 %	1,968 ml	1,850 g	0 ml≙g	14:00	11:00	7:20	4:45	4:20	3:30	2:50
	90 %	1,771 ml	1,665 g	197 ml≙g	18:45	13:15	7:50	5:15	4:45	3:40	3:15
	80 %	1,574 ml	1,480 g	394 ml≙g	30:50	18:00	9:25	5:30	5:00	4:05	3:25
	70 %	1,378 ml	1,295 g	590 ml≙g	33:30	21:00	10:30	6:00	5:20	4:30	3:35
	60 %	1,181 ml	1,110 g	787 ml≙g	-	43:20	11:35	6:40	5:50	5:	
	50 %	984 ml	925 g	984 ml≙g	-	-	12:40	7:00	6:20	5:30	3:50
	40 %	787 ml	740 g	1,181 ml≙g	-	-	19:10	8:40	7:50	6:15	4:25
	30 %	590 ml	555 g	1,378 ml≙g	-	-	39:30	10:25	8:30	7:40	5:45
	20 %	394 ml	370 g	1,574 ml≙g	-	-	-	18:40	11:25	9:20	7:25
	10 %	197 ml	185 g	1,771 ml≙g	-	-	-	45:00	32:30	23:55	16:00
	5 %	98 ml	93 g	1,870 ml≙g	-	-	-	-	-	-	23:25
Watertightness (DIN 14068)	7 bar									
CE classification Declaration of performance (EN 1504-5:2004/2+)	U(S2) W(1) (1/2/3) (5/35)									
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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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 (if necessary diluted according to table) completely into the larger container of component A1
- Mix both components via stirring while pouring until homogeneous

Mixing of component B

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

Application

Application by 2C pump (stainless steel)

- The injection pressure depends on the nature and condition of the building 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

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 with non-shrinking mortar. Preferrably 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
- For detailed information refer to the operating manual of the injection pump

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Product data

Processing	Injection by 2C pump (stainless steel)			
Packing		**Comp. A1**	**Comp. A2**	**Comp. B**
	WEBAC® 270	18.5 kg	1.85 kg	0.1 kg
		Unit		
	WEBAC® F200	1.0 kg		
Storage/Transport	• Between 5 °C and 25 °C • Protect from moisture and light • In original, sealed containers			
Resistance	• Resistant to diluted acids and salts damaging the structure • Resistant to alternating frost and thaw • Reacted gels are insoluble in water and fuels			

Test certificates

- Declaration of Performance according to Construction Products Regulation*
- Testing of corrosion behavior

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.

* tested with undiluted A2 component

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