Gelacryl 30

Gelacryl 30 is a 2-component acrylic based waterproofing injection resin.







· field of application

- Application of horizontal barriers against rising damp in masonry structures.
- · Curtain grouting.
- Waterproofing of underground structures in concrete or masonry (cellars, underground car parks).

advantages

- Gelacryl 30 is injected with a twin piston, 1/1 ratio pump.
- Gelacryl 30 is delivered on site with a composition of 30% solids which is reduced to 15% solids during the injection with the B-component.
- The low viscosity of Gelacryl 30 ensures a deep penetration in the joint and the soil around the joint.
- Exhibits very low permeability for long lasting waterproofing.
- · Non-flammable.
- · No environmental labelling required.
- · Polyacrylate resin, free of acrylamides.
- Has a very good overall chemical resistance and is resistant to petroleum, mineral/vegetable oils and greases(*).

description

Gelacryl 30 is an acrylic based hydrophilic gel, consisting of 2 components: a resin and an initiator which are pumped with a twin piston pump at a 1/1 ratio. Once polymerised, Gelacryl 30 forms a resilient, elastomeric gel.

Resin: Gelacryl 30. Catalyst: TE 300. Initiator: SP 200.

application

Consult the MSDS before mixing and/or handling.

1. Composition

• The injection grout needs to be prepared immediately before the injection. Do not dilute the resin to less than 15% solids when injecting.

Component 1	Component 2
Gelacryl 30	Water
TE 300	SP 200

After preparation, the components are injected simultaneously at a ratio of 1/1.





2. Preparation

Component 1

• Gelacryl 30 vessel. Add the required quantity of TE 300 catalyst to the Gelacryl 30 resin. Gelacryl 30 and TE 300 need to be thoroughly mixed.

Component 2

• SP 200 vessel. The vessel is first filled with the same quantity of water as the Gelacryl 30 vessel after which the SP 200 is added. The mixture is thoroughly mixed.

3. Gel times (typical mixtures)

 Depending on the concentrations of TE 300 catalyst and SP 200 initiator in their respective blends, varying gel times can be obtained. Air, material and background temperatures will also influence gel times. The pH and the nature of the injection substrate will also affect gel times. The following typical gel times can be obtained by mixing the components according to the following formulations.

9 \	ing to the following formalations.								
T (°C)	Product	Resin (I)	TE300 (I)	Water (I)	SP200 (kg)	SP 200 bottles	Gel time		
5	GA 30	22	1,25	23,25	1,575	3,5	1'15"		
5	GA 30	22	1,25	23,25	0,90	2	1'41"		
5	GA 30	22	1,25	23,25	0,675	1,5	2'05"		
5	GA 30	22	1,25	23,25	0,45	1	3'32"		
10	GA 30	22	1,25	23,25	1,575	3,5	49"		
10	GA 30	22	1,25	23,25	1,125	2,5	1'05"		
10	GA 30	22	1,25	23,25	0,90	2	1'18"		
10	GA 30	22	1,25	23,25	0,45	1	2'40"		
15	GA 30	22	1,25	23,25	1,575	3,5	33"		
15	GA 30	22	1,25	23,25	0,90	2	59"		
15	GA 30	22	1,25	23,25	0,45	1	1'46"		
15	GA 30	22	1,25	23,25	0,225	0,5	2'42"		
20	GA 30	22	1,25	23,25	1,575	3,5	23"		
20	GA 30	22	1,25	23,25	0,675	1,5	45"		
20	GA 30	22	1,25	23,25	0,225	0,5	1'26"		
20	GA 30	22	1,25	23,25	0,112	0,25	3'30"		

4. Injection

• The injection work should be carried out with a twin piston, 1/1 ratio pump (IP 2C-Gel). Please read the relevant Technical Data Sheet. For injection procedure, please read the Injection Manual.

technical data/properties

Property	Value	Norm				
Gelacryl 30						
Density	Approx. 1,12 kg/dm³	ASTM D-1638				
Viscosity	Approx. 8 mPas at 25°C	ASTM D-1638				
Solids	Approx. 30%	ASTM D-1010				
Boiling Point	100°C	Test DNC				
Freezing point	< -20°C	Test DNC				
Solubility in water	100%	Test DNC				
Catalyst TE 300						
Concentration	Approx. 85%	Test DNC				
Initiator SP 200						
Density	Approx. 1,9 kg/dm3	ASTM D-1638				
Solubility in water	Approx. 79%	Test DNC				
Cured resin based on a 15% solids mixture.						
Solubility	Insoluble in water and petroleum derivatives	Test DNC				
Expansion in contact with water	< 140%	Test DNC				
Dehydration	Can dehydrate in dry conditions.	Test DNC				

appearance

Gelacryl 30 : green liquid. TE 300 : transparent liquid.

SP 200 : white salt.

After curing, product turns into a flexible gel, which remains flexible under water.

consumption

Has to be estimated by the engineer or operator and depends on width and depth of the cracks and voids to be filled.

packaging

Gelacryl 30

- 25 kg plastic jerry-can.
- 1 pallet = 24 jerry-cans.

TE 300

- 25 kg plastic jerry-can.
- 1 pallet = 24 jerry-cans.

SP 200

- 0,45 kg plastic bottle.
- 1 box = 22 bottles.
- 1 pallet = 24 boxes.

storage

Gelacryl 30, TE 300, SP 200 and KF 500 should be stored in a frost-free environment under cover, clear of the ground, in the original closed packaging. Storage temperature must be below 35°C.

Shelf life: 1 year.

accessories

To be ordered separately

- IP 2C-Gel air driven twin piston pump.
- Packers and connectors.

(Please consult the relevant Technical Data Sheet).

health & safety

Gelacryl 30 is classified as irritating.

Always wear appropriate protective gear: rubber gloves, goggles and boots. In case of contact with the eyes, flush with water for 15 minutes. If swallowed, call a physician immediately. For full information, consult the relevant Material Safety Data Sheet.

 $\,^{(\!\!\!\!^{\!\scriptscriptstyle o}\!\!\!\!)}$ For chemical resistance to particular materials and substances, please contact your De Neef representative.