

DE NEEF[®] Gelacryl

Acrylate Polymer

Product Description

DE NEEF[®] Gelacryl is an acrylate polymer for injection into concrete structures and soils. Its low viscosity makes it ideal for injection into pores, capillaries, hairline cracks, and honeycombed concrete. DE NEEF[®] Gelacryl's low surface tension also makes it suitable for penetration into soils, making it an excellent choice for curtain wall grouting. When pumped at a 1:1 ratio, DE NEEF[®] Gelacryl cures to a non-toxic elastomeric gel.

Product Advantages

- Extremely low viscosity – penetrates into fine cracks and defects in concrete
- Excellent penetration into soils
- Non corrosive and non toxic
- Insoluble in water and petroleum based solvents once cured.
- Excellent thermal resistance 40°F-160°F
- Reaction time can be controlled

Product Applications

DE NEEF[®] Gelacryl is designed for use in any below ground structure or any water retaining structure that will remain moist after application. Especially well suited for:

- Hairline & spider cracks in concrete
- Re-injection of failed polyurethane grout
- Honeycombed concrete
- Curtain grouting
- Temporary support of excavation

Installation Guidelines

Mixing:

“A” Side: In a clean pail pour desired amount of DE NEEF[®] Gelacryl resin and add TE-300 in accordance with the Mix Ratio table to achieve the desired set time. Mix well.

“B” Side: In a separate clean pail, pour clean water of equal quantity to the amount of DE NEEF[®] Gelacryl resin previously poured. Add SP-200 in accordance with Mix Ratio Table and mix well. If extended set times are required KF-500 (retarder) can be added to the resin-side. Contact DE NEEF[®] Technical Service.

Pumping:

DE NEEF® Gelacryl is pumped at a 1:1 ratio through a pump with all stainless steel wetted components. Always begin at the lowest pressure setting available on the pump and increase to the minimum pressure required to get desired resin flow.

Crack Injection:

For concrete crack injection applications consult DE NEEF® Standard Crack Injection Procedures. Due to the ultra low viscosity of the DE NEEF® Gelacryl resin, larger cracks may require application of a surface seal such as hydraulic cement or epoxy.

Curtain Wall grouting:

For curtain grouting applications consult DE NEEF® Standard Curtain Grouting Procedures. Adjust set time to allow for permeation through soils surrounding the structure.

Confirm product performance in specific chemical environment prior to use.

Packaging & Handling

DE NEEF® Gelacryl is packaged as a kit consisting of a of 5.6 gallons of grout (55 lb jerrican), 2 lb. jar of SP-200 initiator*, and 28 oz. can of TE- 300 activator. Shelf life for TE-300 activator is 6 months.

*Shipped: Oxidizer (shipped as haz-mat, UN1505, 5.1 PGIII)

All components should be stored in a dry place at temperatures between 40°F and 80°F. Do not thin with solvents.

Warning! Do not let SP-200 and TE-300 come into contact with each other prior to field mixing. A poisonous gas may result!

STORE COMPONENTS SEPARATELY FROM EACH OTHER

Health and Safety

WARNING:

TE-300 and SP-200 are incompatible with Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest. Refer to Safety Data Sheet for detailed safety precautions.

Limitations

Low temperatures will significantly elongate set times. For best results, bring product to a minimum temperature 50°F for a minimum period of 24 hours prior to use. If site temperatures are extremely low, material should be held in a warm area before and during use to maintain the products temperature. Do not allow water into open containers. Do not apply when ice is present. DO NOT EXCEED 90°F WHEN WARMING.

CAUTION – pH NOTICES

- Water used to activate grouts (“B” side of mix) must be in a range of pH 5.5 – 7 for optimum grout quality.
- Varying water pH will cause the reaction times to change.
- Groundwater should be in the range of pH 3-12.

Properties

DE NEEF® GELACRYL	
Viscosity at 77°F	15-20 cps
Mixed Viscosity	6-8 cps
Appearance	Green
Specific Gravity	1.17
Elongation at Break	100% (ASTM 638)
Post Reaction Expansion	19% at 90% Humidity
Permeability at 29 psi	3.53×10^{-9} cm/s

Note: The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

Mix Ratios

GELACRYL	TE-300	WATER	SP-200	GEL TIME
(US gal)	(fl oz)	(US gal)	(fl oz)	(s)
5.6	14	5.6	6	180
5.6	14	5.6	9	150
5.6	14	5.6	12	120
5.6	14	5.6	15	90
5.6	14	5.6	17	60
5.6	14	5.6	18	45
5.6	14	5.6	20	30
5.6	14	5.6	22	15
5.6	14	5.6	24	5

DE NEEF® Gelacryl is designed for use below ground or where there is permanent moisture. Gel time varies depending on the amount of acceleration and temperature. All data above was collected at 68°F. Do not increase TE-300 above 3% (22 oz per 5.6 gal unit). Increase SP-200 only. Adding excessive amounts of TE-300 can adversely affect the quality of the reacted gel. *Site trials should be done to determine gel time.*

gcpat.com | North America Customer Service: 1 877-4AD-MIX1 (1 877-423-6491)

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