

# Gelacryl™ Superflex

Gelacryl Superflex is a 2-component acrylic based resin developed for injection into pores, cracks, capillaries, voids and honeycombed concrete

---

## Product Description

Gelacryl™ Superflex is a 2-component acrylic based hydrophilic resin, 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 Superflex forms a resilient, highly elastic gel. Due to its exceptionally low viscosity and low surface tension, Gelacryl Superflex exhibits better penetration into cracks than water.

Resin : Gelacryl Superflex

Catalyst : TE 300

Initiator : SP 200

Decelerator : KF 500

## Field of Application

- Repairing water leaks in structures under permanent water pressure.
- Preventative waterproofing of structures under permanent water pressure.
- Water control during tunnelling operations.
- Curtain grouting.
- Waterproofing of underground structures in concrete or masonry (cellars, underground car parks, etc.).
- Sealing of cracks in concrete and rock formations.
- Waterproofing of tunnel liners.

## Appearance

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

GELACRYL SUPERFLEX RESIN	BLUE LIQUID
TE 300	Transparent liquid
SP 200	White salt
KF 500	Orange liquid

## Product Advantages

- Gelacryl Superflex is injected with a twin piston, 1:1 ratio pump.
- The exceptionally low viscosity–Gelacryl Superflex penetrates into cracks 0.1 mm wide.
- Large post-expansion in contact with water: approx. 150%.
- Non-corrosive and non-toxic.
- Excellent adhesion to concrete.
- Has a very good chemical resistance to most acids, alkalis and micro-organisms (\*).
- Polyacrylate resin, free of acrylamides.

(\*) For chemical resistances please contact your GCP representative.

## Consumption

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

## Application

Consult the MSDS before mixing and/or handling.

- Gelacryl Superflex is developed to be used below ground or in conditions of permanent moisture.
- Gelacryl Superflex is typically injected into defective areas. Holes are drilled in the affected area at a 45° angle. Water can be forced into the hole to determine whether all cracks can be injected and if additional holes need to be drilled.
- Visible surface leaks should be sealed with a fast setting cement. Allow the cement to harden completely before injecting Gelacryl Superflex.
- Use standard packers or equipment according to local regulations.
- Gelacryl Superflex is then injected with a high pressure pump capable of 200 bars. This forces the Gelacryl Superflex deep into the structures and allows penetration of even the smallest cracks.
- When surface leaks show up during pumping, stop immediately and seal the leak by approved method.

### 1. Composition

- The injection grout needs to be prepared immediately before the injection. Do not dilute the resin to less than 20% solids when injecting.

COMPONENT 1	COMPONENT 2
Gelacryl Superflex	Water
TE 300	SP 200

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

## 2. Preparation

### Component 1

- Gelacryl Superflex container. Add the required quantity of TE 300 catalyst to the Gelacryl Superflex resin. Gelacryl and TE 300 need to be thoroughly mixed.

### Component 2

- SP 200 tank. The tank is first filled with the required quantity of water as the Gelacryl Superflex tank after which the SP 200 is added. The mixture is thoroughly mixed.
- Typically a 2% accelerator is used. At temperatures below 15 °C or in case of high water ingress, use 3-4% accelerator. This will give a normal gel time of 1-3 minutes which is appropriate for waterproofing active leaks.

## 3. Injection

- The injection work should be carried out with a twin piston, 1:1 ratio high pressure pump. Please read the relevant Technical Data Sheet. For injection procedure, please read the Injection Manual.
- Delayed gel times (for example for soil injections) can be reached by adding KF 500 decelerator. Contact our technical department for correct formulations.

T (°C)	PRODUCT	RESIN (l)	TE 300 (L)	WATER (l)	SP 200 (KG)	NO. OF CONTAINERS	GEL TIME
5°C	GASF	42.00	1.90	42.00	2.25	5	1'
5°C	GASF	42.00	1.90	42.00	1.35	3	2'
5°C	GASF	42.00	1.90	42.00	0.90	2	3'
10°C	GASF	42.00	1.30	42.00	1.80	4	1'
10°C	GASF	42.00	1.30	42.00	0.90	2	2'
10°C	GASF	42.00	1.30	42.00	0.45	1	3'
15°C	GASF	42.00	1.10	42.00	1.35	3	1'
15°C	GASF	42.00	1.10	42.00	0.90	2	2'
15°C	GASF	42.00	1.10	42.00	0.45	1	3'
20°C	GASF	42.00	0.80	42.00	1.35	3	1'
20°C	GASF	42.00	0.80	42.00	0.90	2	2'
20°C	GASF	42.00	0.80	42.00	0.45	1	3'

## Technical Data / Properties

PROPERTY	VALUE	NORM
<b>Gelacryl Superflex</b>		
Density	Approx. 1.17 kg/dm <sup>3</sup>	ASTM D-1638
Viscosity at 25 °C	Approx. 15-20 mPas	ASTM D-1638
Solids	Approx. 45%	ASTM D-1010
Boiling Point	100 °C	Test DNC
Solubility in water	100%	Test DNC
<b>Catalyst TE 300</b>		
Concentration	Approx. 85%	Test DNC
<b>Initiator SP 200</b>		
Density	Approx. 1.9 kg/dm <sup>3</sup>	ASTM D-1638
Solubility in water	Approx. 79%	Test DNC
<b>Decelerator KF 500</b>		
Concentration	10%	Test DNC
Dilution	Clean tap water	
<b>Cured resin based on a 22% solids mixture</b>		
Elongation at Break	300%	ASTM 638
Expansion in contact with water	Approx. 150%	Test DNC

## Packaging

### GELACRYL SUPERFLEX

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
----------	----------

---

**KF 500**

25 kg plastic jerry-can

---

1 pallet	24 jerry-cans
----------	---------------

---

## Storage

Gelacryl Superflex, 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-200-A air driven twin piston pump.
- Packers and connectors.  
(Please consult the relevant Technical Data Sheet).

## Health and Safety

Gelacryl Superflex 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.

## gcpat.hk | Hong Kong customer service: 852 2675 7898

Australia 1800 855 525 email: au.sbmsales@gcpat.com New Zealand +64 9 448 1146 China Mainland +86 21 3158 2888 Hong Kong +852 2675 7898 India +91 124 488 5900 Indonesia +62 21 893 4260 Japan +81 3 5226 0231 Korea +82 32 820 0800 Malaysia +60 3 9074 6133 Philippines +63 49 549 7373 Singapore +65 6265 3033 Thailand +66 2 709 4470 Vietnam +84 8 3710 6168

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

Gelacryl is a trademark, which may be registered in the United States and/or other countries, of GCP Applied Technologies, Inc. This trademark list has been compiled using available published information as of the publication date and may not accurately reflect current trademark ownership or status.

© Copyright 2017 GCP Applied Technologies, Inc. All rights reserved.

GCP Applied Technologies Inc., 62 Whittemore Avenue, Cambridge, MA 02140, USA

This document is only current as of the last updated date stated below and is valid only for use in Hong Kong. It is important that you always refer to the currently available information at the URL below to provide the most current product information at the time of use. Additional literature such as Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations and other relevant documents are also available on [www.gcpat.hk](http://www.gcpat.hk). Information found on other websites must not be relied upon, as they may not be up-to-date or applicable to the conditions in your location and we do not accept any responsibility for their content. If there are any conflicts or if you need more information, please contact GCP Customer Service.

Last Updated: 2018-10-24

[gcpat.hk/solutions/products/de-neef-waterproofing-injection-solutions/gelacryl-superflex](http://gcpat.hk/solutions/products/de-neef-waterproofing-injection-solutions/gelacryl-superflex)