SPETEC® SEAL GT350

LOW VISCOSITY, FLEXIBLE, HYDROPHILIC INJECTION RESIN FOR SEALING LEAKING CRACKS AND JOINTS

DESCRIPTION

MDI based hydrophilic, one-component, low viscosity, flexible, phthalate free, polyurethane injection resin for waterproofing.
In contact with water the SPETEC® SEAL GT350 will expand and set as a permanent water seal inside the crack or joint.

ADVANTAGES

- 1 Component hydrophilic PU resin
- Additional waterproofing due to post expansion.
- Fast reaction with immediate increase of viscosity.
- Reaction can be set faster with SPETEC® Gen Acc.
- Can be injected as 1 component or 2 component in combination with water, maximum amount of water = 200 %.
- Expansion rate of 4.5-7V.
- Cured polyurethane is highly flexible, ideally suited for structures where a high degree of settlement and movement can occur.
- Cured polyurethane is harmless for the environment and resistant to biological attacks.

FIELD OF APPLICATION

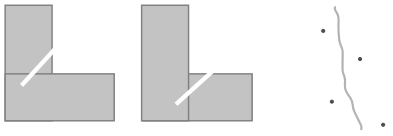
- Cut - off water leaks in concrete, brickwork and sewers where movement and settlement may occur.
- Water cut-off of water leaks in foundations such as diaphragm walls, piling sheets and secant piles.
- Sealing water-carrying cracks and joints in tunnel segments.
- Curtain grouting behind tunnel, concrete, brickwork and sewer walls.
- Injection of failing membranes and liners in tunnels and buildings.

APPLICATION

Note: the following are a few typical application descriptions. In case of other jobsite parameters, please contact our technical department.

PRELIMINARY ANALYSES

For leaking joints, check how the joint runs into the construction. Injection holes have to be drilled into the joint.
For leaking cracks, drill the injection holes in a zig-zag pattern around the crack to make sure that the injection hole intersects with the crack.



REQUIRED TOOLS

- Drill and drill bits of appropriate diameter and length.
- Packers of appropriate diameter and length.
- Injection pump; manual, pneumatic or electric.

PREPARATION OF THE SUBSTRATE

Drill under an angle of 45° into the crack or joint. Ideally the injection hole should intersect the joint or crack about half way the thickness of the wall or slab.
Blow the dust out of the injection hole.
Fix a packer of the right diameter into the injection hole.

PREPARATION OF THE PRODUCT

Read the technical and safety data sheets prior to commencement of the injection works.
In case of reaction times needs to be faster than the standard, its possible to add accelerator SPETEC® Gen Acc to the resin.
Vigorously shake the SPETEC® Gen Acc accelerator before use and add the required quantity (2-10 %) into the SPETEC® SEAL GT350 resin. Mix the accelerator homogeneously into the resin and protect against moisture and rain to prevent premature reaction. Only prepare that amount of product that can be processed in one day.
At temperatures of 10°C or lower, and especially when injecting into cracks, it is strongly recommended to heat the product by placing a SPETEC® pail heater at the pail.

PREPARATION OF THE EQUIPMENT

Depending on the application, injection can be carried out using a hand pump, pneumatic pump or electric pump.
Use a 2-component pump with adjustable ratio for injection of SPETEC® SEAL GT350 with water.
Check if the pump is working properly.
Prior to injection, the pump must be flushed with SPETEC® PUMP CLEANER and be completely free of water to prevent pump blockage.

INJECTION

Start the injection at the first packer; for vertical joints or cracks this is usually the lowest packer.
Do not over pressurise while injecting; the correct injection pressure is the pressure that allows to resin to flow into the crack or joint. Avoid injecting at pressures of more than 100 bars.
If unreacted resin comes out of the joint or crack, stop the injection and move on to the next packer.
After the last injection of resin into the packer, shoot a little bit of water into the packer in order to make sure that the last injected resin will react as well.
Only catalyse the resin you will use within the next few hours.
Do not let resin stay in the pump overnight.

FINISHING

After injection, remove the packers from the concrete and fill the holes with a fast setting cement or any other appropriate filler material.

APPLICATION CONDITIONS

Standard applicable between 5°C and 35°C. For applications outside these conditions, please contact our technical service.

It is recommended to warm up the resin and accelerator in extremely cold conditions. Do not inject into substrates or sub-soils with freezing conditions where there is no liquid water for the resin.

SPETEC
Korachem NV is part of Koramic Chemicals
Gulkenrodestraat 3 - B-2160 Wommelgem - België
info@korachem.com - www.korachem.com - Tel.+32 3 320 02 11

CLEANING AND MAINTENANCE

After the injection, clean the pump with SPETEC® PUMP CLEANER. If the pump will not be used for several days, put oil into the pump and leave it there until the next usage. Never rinse the pump with water.

COMPLIMENTARY PRODUCTS

- SPETEC® PUMP CLEANER
- SPETEC® PACKERS & ACCESSORIES
- CERMIPLUG
- SPETEC® Gen Acc (optional)

ADVICE

Water must always be present during the injection of SPETEC® SEAL G350 as it is a water-reactive resin.

TECHNICAL DATA

APPEARANCE

SPETEC® SEAL GT350, uncured (Appearance: white liquid)		
Viscosity at 23°C	EN ISO 3219	±280 mPa.s
Density	EN ISO 2811-1	±1.16 kg/dm³

SPETEC® Gen Acc, Accelerator for SPETEC® SEAL G350 (Appearance: yellow - orange liquid)		
Viscosity at 25°C	Brookfield SP3 - 200 rpm	± 75 mPa.s
Flash point		156°C
Density	EN ISO 2811-1	± 1.05 kg/dm³

REACTION TIMES

SPETEC® Gen Acc	20°C		
%	Start	End	
0	45"	135"	7V
2	40"	90"	5V
5	35"	70"	4.5V
10	25"	60"	4.5V

* The above reaction times are measured on a mixture of 1 part resin with 1 part water + a percentage accelerator as described above.

Without accelerator and the presence of a minimum of 5 wt% water, the reaction takes place at 20°C between approx. 6 and 40 minutes and an expansion volume of 9V is obtained.

CONSUMPTION

Consumption has to be assessed on site and is influenced by the amount of water leaking, thickness of the concrete slab or wall, presence of voids in and around the concrete etc.

CHEMICAL RESISTANCES

Cured polyurethane exhibits good chemical resistance, is harmless for the environment and resistant to biological attack. Contact our Technical Service for more information.

CE MARKING

CE

KORACHEM NV, Gulkenrodestraat 3, 2160 Wommelgem, Belgium	
23	
EN 1504-5 0749-CPR-BC2-565-4714-0005-001	
Injection product with reactive polymer binder (P) for ductile filling of cracks, voids, and interstices U(D2) W(3) (2/3) (5/50)	
Adhesion and elongation capacity	0.2 N/mm² > 10 %
Watertightness	7 x 10⁵ Pa
Workability crack, void, or interstice - Width: Moisture state: - Width: Moisture state:	 From 0.5 mm Damp and wet From 0.3 to 0.5 mm Wet
Viscosity	280 mPa.s
Compatibility with concrete	< 20%
Corrosion behaviour	Deemed to have no corrosive effect
Release of dangerous substances	Complies with 5.4
DOP N°: DOP04SPT01S5	

REFERENCE DOCUMENTS

bsi. ISO 9001:2015 Quality Management FM 78518

bsi. ISO 14001:2015 Environmental Management EMS 716699

COMPLIANT - COMPLIANT REACH

PACKAGING

SPETEC® SEAL GT350	22 kg	Pails	24 pails/pallet
	220 kg	Steel drums	4 drums/pallet
SPETEC® Gen Acc	2 kg	Plastic Bottles	4 bottles/box 44 boxes/pallet
	20 kg	Metal Cans	24 pails/pallet

STORAGE AND SHELF LIFE

SPETEC® SEAL GT350 is moisture sensitive and should be stored in a dry area between +5°C and +30°C.
Shelf life of the resin:
24 months after production date, in original packaging.
Shelf life of the accelerator:
12 months after production date, in original packaging
Once opened, containers should be used as soon as possible.

SAFETY PRECAUTIONS

Avoid contact with eyes and skin, always use personal protective equipment in compliance with local regulations.
Read the relevant Material Safety Data Sheet before use. Material Safety Data Sheets are available on www.korachem.com.
When in doubt contact KORACHEM Technical Service.

The above information is provided in good faith, but without any guarantees. The application, use and processing of the products are beyond our control and are, as such, the sole responsibility of the user/processor. In the event that Korachem NV is still held liable for damages, then the claim will still be limited to the value of the goods delivered. We always aim to deliver consistently high quality goods. All values on this technical sheet are average values that result from tests carried out under laboratory conditions (20 °C and 50% RH). Values that are measured on the construction site may show a slight deviation since the environmental conditions, the application, and the way of processing our products are beyond our control. Do not add any products other than those indicated on the technical documentation. This version replaces all previous versions. Version 2.0 Date: 27 August 2025 2:51 pm

SPETEC
Korachem NV is part of Koramic Chemicals
Gulkenrodestraat 3 - B-2160 Wommelgem - België
info@korachem.com - www.korachem.com - Tel.+32 3 320 02 11