

PRODUCT DATA

LEAK INJECT 509 Z ACRYL ELASTIC ACRYLIC INJECTION RESIN

PRODUCT DESCRIPTION

Leak Inject 509 Z Acryl is a 4-component acrylic injection resin with exceptional adhesion properties used for the sealing of cracks and voids against water ingress. It is a low viscosity product with high reactivity based on acrylic and methacrylic monomers. It does not contain acrylamide, methacrylamide, formaldehyde or solvents. Leak Inject 509 Z Acryl is designed to absorb cyclic shrinkage and expansion within injected cracks and/or voids due to temperature variation.

APPLICATION

Water sealing of cracks in walls, floors, sewers, below grade construction and underground structures. Leak Inject 509 Z Acryl is suitable for use in masonry, block work or concrete construction providing it is sufficiently sound to resist the injection pressure. It does not require the presence of moisture to maintain flexibility and can therefore be used in areas that are not permanently in contact with water (ie. fluctuating ground water level).

PROPERTIES

- Leak Inject 509 Z Acryl reacts to form an elastic, durable and chemically resistant gel which swells in the presence of water.
- Low viscosity allows deep penetration into fine cracks.
- Good general chemical resistance characteristics (Eg. Petroleum, mineral and vegetable oils, greases).
- Excellent adhesion on most building materials including concrete, cement and brick.
- Adjustable reaction speed from a few seconds to several minutes.
- Contains no toxic solvents and is considered non-flammable.
- Leak Inject 509 Z Acryl has an extremely high water retention capacity which means cracking of the gel due to drying out caused by temperature and/or ground water level fluctuations is impossible.
- Excellent swelling properties of the dried out gel gives exceptional water sealing season after season and year after year.

APPLICATION

Leak Inject 509 Z Acryl consists of 4 components:

- A1: 509 Z Acryl (the acrylic resin)
- A2: 509 Z Acryl Cat (the catalyst)
- B: 509 Z Acryl Init (the initiator)
- C: Water

2 Solutions required for application:

- Solution 1: Is a mixture of the acrylic resin 509 Z Acryl (component A1) with the catalyst 509 Z Acryl Cat (component A2).
- Solution 2: Is a mixture of water with the initiator 509 Z Acryl Init (component B).

TECHNICAL DATA (Typical Values)

Component A1 (Resin)	<ul style="list-style-type: none"> • Appearance: Purple-Pink Liquid • Density: 1.15 g/ml • % Active Ingredients: 42% - 48% • Viscosity (20°C): 19 mPas • pH: 6.5 – 8 • Completely compatible with water
Component A2 (Catalyst)	<ul style="list-style-type: none"> • Appearance: Clear Yellow Liquid • Density: 1.11 g/ml • Viscosity (20°C): 22 mPas • Completely compatible with water
Component B (Initiator)	White, water dilutable powder
Viscosity (Mixed System)	<60 mPas
Minimum Application Temperature	5°C
Elongation at Break	>50%
Watertightness Under Pressure (EN 14068)	Waterproof at 2×10^5 Pa
Compatibility with Concrete (EN 12637-1)	Pass (compatible with concrete)
Sensitivity to Wet-Dry Cycles (EN 14498 B)	No change in swelling capacity after 10 wet-dry cycles (One wet-dry cycle consists of 1 day drying at 50°C followed by 6 days of immersion in water at 21°C)
Swelling Capacity Under Water (EN 14498 A)	Swelling capacity reaches a constant level
Increase in Volume with Storage Under Water (EN 14498)	150% after 7 days immersion in water at 21°C
Shelf Life	6 months after production date in the original, unopened and undamaged packaging. Leak Inject 509 Z Acryl has to be stored in a dry and dark place between +5°C and +25°C

In order to obtain the acrylic gel, these 2 solutions are mixed at a volumetric ratio of 1:1.

Reaction times (22°C): To vary the reaction time only requires the quantity of initiator to be changed, the quantity of catalyst remains constant.

LEAK INJECT 509 Z ACRYL

ELASTIC ACRYLIC INJECTION RESIN

Solution 1: Add 0.45L (0.5kg) catalyst to 8.7L (10 kg) acrylic resin.

Solution 2: Add (x) kg initiator to 8.7L (8.7 kg) water.

Determination of initiator quantity (x) for 8.7L (8.7 kg) water for Solution 2: (x) kg initiator in 8.7L (8.7 kg) water

Initiator Quantity (x)	Reaction Time
0.5 kg	32 seconds*
0.4 kg	42 seconds
0.3 kg	50 seconds
0.2 kg	1 minute, 14 seconds
0.1 kg	2 minutes, 16 seconds
0.05 kg	3 minutes

*Standard Composition

If longer reaction times are required please contact Stonhard's Technical Services Department. Prepare only as much A and B component that can be used the same day. Leak Inject 509 Z Acryl is injected into the crack with a two-component manual, electric or pneumatic pump. The pump components that come into contact with the resin must be stainless steel.

PACKAGING

- Leak Inject 509 Z Acryl: 25 kg
- Leak Inject 509 Z Acryl Cat: 1.25 kg
- Leak Inject 509 Z Acryl Init: 2 x 0.625 kg

CLEANING

Clean equipment with water.

PRECAUTIONS AND SECURITY MEASURES

- Protect the products against the UV-light, sunlight and store between 0°C and 25°C.
- Do not use water with a high mineral content for the preparation of solution 2. Dissolved minerals have been known to accelerate the gel reaction.
- Leak Inject 509 Z Acryl can be irritating to skin and eyes: Wear appropriate PPE including, safety glasses, gloves and overalls.
- In case of contact with skin: Wash with copious amounts of water and soap. Rinse well afterwards.
- In case of contact with the eyes: Rinse the eyes for a few minutes with clean water. Consult a doctor.
- Transport: No special regulations.
- Clean equipment with water and detergent.
- Absorb spilled resin with sand or sawdust and dispose of according to local regulations.

NOTES

- Safety Data Sheets for Leak Inject 509 Z Acryl products are available upon request.
- A staff of Technical Service Engineers is available to assist with installation or to answer questions related to Leak Inject 509 Z Acryl products.
- For worldwide availability, additional product information and technical support, contact your local sales representative, or call Stonhard at (800) 263.3112.

Important:

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