

ROCK INJECTION 25

Low viscosity injection resin

PRODUCT DESCRIPTION

Rock Injection 25 Injection is a two part, solvent-free, low viscosity injection liquid, based on high strength epoxy resin. (= Normal Potlife) is used for substrate temperatures between +5°C and +30°C (UK).

USES

As an injection resin with good adhesion to concrete, mortar, stone, steel and wood. Rock Injection 25 Injection is used to fill and seal voids and cracks in structures such as bridges and other civil engineering buildings, industrial and residential buildings, e.g. columns, beams, foundations, walls, floors and water retaining structures. It not only forms an effective barrier against water infiltration and corrosion promoting media, but it also structurally bonds the concrete sections together.

CHARACTERISTICS / ADVANTAGES

- Solvent-free
- Suitable for both, dry and damp conditions
- Usable at low temperatures
- Shrinkage free hardening
- High mechanical and adhesive strengths
- Hard but not brittle
- Low viscosity
- Injectable with single component pumps

PRODUCT DATA

FORM / COLOURS

Part A:	Transparent
Part B:	Brownish
Part A+B mixed:	Yellowish-brownish

PACKAGING

Pre batched:	
Part A+B:	10 x 1 kg units

STORAGE

STORAGE CONDITIONS/ SHELF-LIFE

24 months from date of production if stored properly in unopened, undamaged and sealed original packaging, in dry conditions at temperatures between +5°C and +30°C.

TECHNICAL DATA

CHEMICAL BASE

Modified solvent-free two-part epoxy resin.

DENSITY

Part A:	1.1 kg/l (at +20°C)
Part B:	1.0 kg/l (at +20°C)
Part A+B mixed (2 : 1):	1.1 kg/l (at +20°C)

VISCOSITY

Temperature	Type Normal	part A+B mixed (2 : 1)
+10°C	~ 1200 mPa_s	
+20°C	~ 430 mPa_s	
+30°C	~ 220 mPa_s	
+40°C	-	

THERMAL EXPANSION COEFFICIENT

89 x 10⁻⁶ per °C (from -20°C to +40°C) (According to EN ISO 1770)

MECHANICAL / PHYSICAL PROPERTIES

Compressive Strength

52 N/mm² (after 7 days at +23°C) (According to ASTM D695-96)

Flexural Strength

61 N/mm² (after 7 days at +23°C) (According to DIN 53452)

Tensile Strength

37 N/mm² (after 7 days at +23°C) (According to ISO 527)

Bond Strength

To concrete: (According to DafStb-Richtlinie, part 3) > 4 N/mm² (failure in concrete) (after 7 days at +23°C)

E-Modulus

Flexural Strength:
1800 N/mm² (after 7 days at +23°C)
(According to DIN 53 452)

SYSTEM INFORMATION

APPLICATION DETAILS

Consumption / Yield 1 kg of Rock Injection 25 Injection is ~ equal to 1 l injection resin.

Substrate Preparation Requirements:

Sound, clean, free from oil and grease, old coatings and surface treatments etc.

Pre-treatment for good bond:

Concrete, mortar, stone should be thoroughly prepared by high pressure water jetting or mechanical means such as grinding, chiseling etc. Cracks must be

Cleaned to remove dust with compressed air.

APPLICATION CONDITIONS / LIMITATIONS

Substrate Temperature +5°C min. / +30°C max.

Substrate Humidity Dry or damp (SSD - Saturated Surface Dry: no standing water)

APPLICATION INSTRUCTIONS

Mixing

Mixing ratio A : B = 2 : 1 parts by weight and by volume

Mixing Time

Prebatched packaging:

Add all of part B to part A. Mix with an electric mixer at slow speed (max. 250 rpm)

for at least 3 minutes. Avoid entraining air.

Bulk packaging:

Add both parts in the correct proportion into a suitable clean, dry container and mix in the same way as for the prebatched units.

APPLICATION METHOD / TOOLS

Cracks in horizontal slabs:
Saturate a few times using a brush or gravity fill them by pouring mixed Rock Injection 25 Injection **between two “dams” e.g. sealant.**
Cracks penetrating slabs to their soffit should first be sealed on the underside, e.g.
Cracks in vertical structures:
Mixed Rock Injection 25 Injection can be injected under pressure into the cracks using a single component injection pump.
Injection ports (packers) are set at approx. 25 cm intervals beside the crack and the crack between the injection ports (packers) sealed e.g. to prevent injection resin to escape during the injection process. Vertical cracks should always be injected from the bottom upwards.
As soon as injection resin oozes out of the next packer / injection port, the first one is sealed and the injection process continued from the next one.
After completion of the injection process, the injection ports (packers) as well as the sealing material between the ports are removed.

CLEANING OF TOOLS

Clean all tools and application equipment with Cleaner immediately after use. Hardened / cured material can only be mechanically removed.

Potlife

Temperature	Normal Type (1 kg mixture)
+5°C	~ 120 minutes
+10°C	~ 80 minutes
+23°C	~ 25 minutes
+30°C	~ 10 minutes
+40°C	–

NOTES ON APPLICATION /LIMITATIONS

Maximum width of cracks to be injected: 5 mm.
Rock Injection 25 Injection is suitable for dry and damp, but not for wet injection conditions.
Value Base All technical data stated in this Product Data Sheet are based on laboratory tests.
Actual measured data may vary due to circumstances beyond our control.

HEALTH AND SAFETY INFORMATION

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.



Al-Obour Buildings - Salah Salem Road - Nasr City - Cairo - Egypt.
10th Of Ramadan City.



info@CityChem.net



[@City_Chem](https://twitter.com/City_Chem)



[City Chem](https://www.facebook.com/CityChem)



+202 240 456 35



+2010 277 810 11



+2010 672 213 44

The Information Herein is Based on Our Present Knowledge and Experiences. This Information Merely Describes the Properties of Our Products but No Guarantee In the legal Sense Shall Be Implied. We Recommend Testing Our Products As To Their Suitability For Your Envisaged Purpose Prior To Use.
No Warranties Of Any Kind, Either Express or Implied Including Warranties of Merchantability or Fitness For a Particular Purpose Are Made Regarding Any Products Mentioned Herein and Data or Information That Such Products, Data or Information May Be Used Without Infringing Intellectual Property Rights of Third Parties.
We Reserve The Right To Make Any Changes According To Technological Progress or Further Developments.
This Copy Replaces All Previous Versions - Printed in Egypt - 2020.



CONSTRUCTION