

LOW VISCOUS EPOXY INJECTION RESIN

FIELD OF APPLICATION

EUCOCOL EP INJECT is a low viscous epoxy resin for structural repair of cracks, hairline cracks in dry and wet concrete. The resin can also be used as an adhesive, for anchoring, pouring in very thin layer thicknesses, ...

BENEFITS & FEATURES

- Low viscosity
- · Excellent adhesion to concrete.
- Long processing time
- Simple mixing ratio
- · Good and deep penetration into the crack.

APPLICATION

Application conditions

EUCOCOL EP INJECT must be stored between +15 and +25°C, approximately 24 hours before application. The surface, the ambient temperature and the temperature of the equipment to be used must be between +10°C and +30°C. Never work with EUCOCOL EP INJECT below +10°C.

Relative ambient humidity: max. 80%.

Substrate moisture content: < 10% (weight percent).

Compressive strength of the substrate: min. 25 N/mm².

Tensile strength of the substrate: min. 1.5 N/mm².

Tools & complementary products

- Mixer with spindle
- Injection equipment and packers
- Injection pump or grease pump (depending on the scope of the project).
- EUCOREP EP PASTE
- EUCOSOLV MEK

Preparations

Mechanically remove all loose parts, then brush well and remove dust with an industrial vacuum cleaner. The surface must be free of dirt, grease, release agent, grease, old, demoulding oil, cement skin, old paint layers that do not adhere well, coatings, synthetic resin layers, adhesives, bitumen, ... or other matters that can adversely influence the adhesion. The substrate must be mechanically pretreated. For example by bullet blasting, sandblasting or by sanding the surface.

Prepare metal substrates by blasting them. The roughness grade for metal surfaces is SA 2 1/2. Then immediately degrease the surface with EUCO-SOLV MEK. After complete evaporation of the solvent, immediately apply a suitable metal primer to prevent re-oxidation of the steel.

Drill the injection holes and install the packers. Or, glue flat nipples to the crack and seal the crack with EUCOREP EP PASTE.

Preparation of the product

First briefly mix the EUCOCOL EP INJECT A-component. Then add the full amount of the EUCOCOL EP INJECT B-component to the A-component. Mix again to obtain a homogeneous mass. mixing is always done with a mixer + spindle at a moderate speed.

Application of the product

Injection into concrete:

EUCOCOL EP INJECT is injected into the crack with a low pressure pump.

For vertical applications: Start the injection on the bottom packer / adhesive nipple.

For horizontal applications: Start the injection on the packer / adhesive nipple at the smallest crack width.

Inject the crack until the resin reaches the next packer / injection nipple and repeat this procedure for each nipple until the crack is completely filled. Never mix more resin than can be used within the processing time indicated on this technical data sheet.

Adhesive:

EUCOCOL EP INJECT is an excellent adhesive for bonding flat parts. Apply the adhesive to the flat areas with a brush. Press these together for 24 hours. Or, if necessary, support the piece to be glued by means of props for at least 24 hours.

Finishing

After one day, EUCOCOL EP INJECT is cured and the injection nipples can be removed.

EUCOREP EP PASTE can then optionally be sanded to obtain a smoother surface before finishing with a paint, coating or the like.

Cleaning of the tools

Clean the used tools with EUCOSOLV MEK. Cured product residue must be removed mechanically.

MAINTENANCE AFTER APPLICATION

Does not apply.

TECHNICAL DATA

Consumption

Depends on the fill level, crack width and depth.

Technical data & reaction times

Property	Value
Basic raw materials	A-component: Modified epoxy resin B-component: Polyamine hardener
Density	1.1 kg/dm ³
Viscosity at 25°C	85 mPa.s
Pressure resistance	>100 N/mm²
Tensile resistance	>50 N/mm²
Flexural strength	>60 N/mm²
Adhesion to concrete Adhesion to damp concrete Adhesion to steel	6 N/mm ² 3,6 N/mm ² >12 N/mm ²
Pot life (100 g)	ca 80' bij 25°C
Mixing ratio A : B	10 : 3 (weight)
Curing	Shrink-free.
Adhesion in shear test	Monolithic concrete failure
Volumetric shrinkage	<3%
Glass transition temperature	> 40°C
Workability	Crack width from 0,3 mm



Moisture level in the crack	Dry, damp and wet
Durability	Meets the requirements
Corrosive behaviour towards the reinforcement steel	Non corrosive
Dangerous substances	Complies with 5.4
Colour	Amber transparent

Pot life after mixing: 80 minutes Mechanical load: After 48 hours.

Full chemical resistance: After 7 days. (Note: water is also a chemical product)

Full curing: after 7 days.

Times measured at $\pm 20^{\circ}$ C. Lower temperatures extend and higher temperatures shorten the curing time.

Chemical resistances

Good chemical resistance against alkalis, petroleum derivatives, battery acid, diluted organic acids, salts and solutions. For more information, please contact EUCOCHEM BV.

Additional documentation & referrals

Always consult all technical data sheets and material safety data sheets of the products to be used. Always work with clean tools in good condition.

APPEARANCE - COMPOSITION - PACKAGING

EUCOCOL EP INJECT is available as follows:

3 kg set

Comp A: 2,31 kg Comp B: 0.69 kg

Storage takes place in a dry room between +5°C and +30°C in its unopened, original packaging; shelf life of 24 months after production date, if stored under the above mentioned conditions.

ADDITIONAL COMMENTS

For special applications it is advisable to consult your EUCOCHEM BV representative.

SAFETY PRECAUTIONS

Always use personal protection in accordance with the local guidelines. Consult the appropriate safety sheets before use. All most recent safety data sheets are always available at op www.eucochem.com. When in doubt, contact our technical service.

All information in this technical data sheet is provided in good faith and without any guarantees. The choice of a product for any application by the buyer or applicator, the processing of the products, the preparations, the finishing, the use of the right equipment to apply the products and all this in the broadest sense, are entirely beyond our control and are therefore entirely the responsibility of the buyer or applicator. Therefore, but not be all the products of the buyer of applicator. Therefore, but nevertheless be held responsible for damage incurred, the claim will always be limited to the value of the necessary EUCOCHEM but products to be delivered in order to carry out a minimal repair. EUCOCHEM be strong to deliver products of consistent, good quality. All values on the technical data sheet are average values and are the result of tests performed under laboratory conditions. Values that are measured in jobsite conditions and the like may deviate from the stated values. This is because the environmental conditions, the application and the manner of processing our products are also outside our control. Please note that you should not add any products other than those indicated in our technical documentation. Only use EUCOCHEM by products or system under construction. If you combine products from different suppliers or brands, the warranty expires irrevocably. When applying the EUCOCHEM by conconsult the construction site log at any time and / or request a copy to check whether the products and systems have been correctly installed or in accordance with the regulations set by EUCOCHEM by. We also refer to our general terms and conditions in case of dispute. This version of the technical data sheet replaces all previous versions. Version 1.0 Date: 14 October 2021 11:03 am

