# Deltapox INJ

A low viscosity, 2-component epoxy injection resin for structural injections in dry substrates. Deltapox INJ should be used in dry conditions.







#### · field of application

- Low pressure injection for the structural bonding of cracks and microcracks in dry concrete.
- Bonding and anchoring.
- Sealing of porous low density concrete.

# advantages

- Low viscosity: deep penetration in the cracks.
- · Very good adhesion: exceeds the cohesion of the concrete.
- · Solvent free.
- Fast Curing: the injected area can be put back in service in a very short time period.
- Cured Deltapox INJ is resistant to acids, alkalis, oils, greases and petrol derivatives.

### description

Pre-weighted 2-component epoxy resin, which cures into a rigid compound.

# application

# 1. Surface preparation

Surfaces to be repaired or sealed need to be clean and sound. The concrete surface must be free of dust, laitance, sealers, grease or any other contaminants that might influence bonding of the resin to the concrete.

#### 2. Injection ports

Entry ports for injecting should be approved devices spaced at appropriate intervals to accomplish full penetration of the resin into the cracks or voids.

#### **Drilled ports**

- Drilling of cracks for packers needs to be executed in accordance with local regulations. After drilling the hole, insert packer.
   Glued ports (plastic or metal).
- The injection ports should be fixed to the surface of the crack with Multitek Adhesive SD (dry surface).
- Apply a layer of Multitek Adhesive SD, polyester paste or fast curing cement to the surface of the crack.

#### 3. Mixing

- Mix the pre-weighted quantities of resin (component A) and hardener (component B) with a low speed mixer (300 rpm) until a homogeneous liquid is obtained. Never mix more material than the quantity that can be used up within 40 minutes.
- Mixing ratio A/B = 2/1.





#### 4. Injection

- The crack can be injected with a manual (single piston) pump or a mechanical (single or double piston) injection pump.
- Initial hardening time: ± 24 h at 20°C.
- Uncured material and equipment should be cleaned with solvent MEK.

# • technical data/properties

Property	Value	Norm
Bonding Strength on Steel	Approx. 15 N/mm <sup>2</sup>	Klima 23150
Compressive Strength	Approx. 95-100 N/mm <sup>2</sup>	DIN 50014
Tensile Strength	> 50 N/mm <sup>2</sup>	ASTM D-638
E-Modulus	Approx. 2900 N/mm <sup>2</sup>	ASTM D-638
Elongation at Break	Approx. 6,5%	ASTM D-638
Density	1-1,2 kg/dm <sup>3</sup>	ASTM D-638
Viscosity (mixture)	Approx. 300-400 mPas at 25°C	ASTM D-1638
Pot life	Approx. 40 minutes (100g at 20°C)	Test DNC
Curing Time	Approx. 24 h at 20°C	Test DNC
Minimum temperature for application	Approx. 10°C	Test DNC

Full chemical or mechanical resistances are only reached after a curing period of 7 days at 20°C. Mechanical properties of epoxy resins decrease at temperatures higher than  $50^{\circ}$ C

# appearance

Pre-weighted.

Component A : Epoxy resin.

Component B : Polyamine hardener.
Colour : Amber transparent.

#### consumption

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

#### packaging

# Deltapox INJ (3 kg set) Component A: metal pail

net : 2 kg.gross : 2,17 kg.

# Component B: metal pail

net : 1 kg.gross : 1,08 kg.

#### storage

Deltapox INJ is moisture sensitive and should be stored in original containers in a dry area. Storage temperature must be between 5°C and 30°C. Once the packaging has been opened, the useful life of the material is greatly reduced and it should be used as soon as possible.

Shelf life: 2 years.

#### accessories

#### To be ordered separately

- IP 1C-Manual hand pump.
- IP 1C-Compact electrical airless diaphragm pump.
- Packers and connectors.

(Please consult the relevant data sheet)

#### · health & safety

Deltapox INJ component A is classified as irritating.

Deltapox INJ component B is classified as corrosive.

Always wear protective clothing, gloves and protective goggles.

For full information, consult the relevant Material Safety Data Sheet.

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

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