

Reinforcing Purpose, Epoxy Based Injection System

Description

EPOX IN 25, is an epoxy based, two component, without filler, injection system that fills and holds together hole and cracks of construction elements with high diffusion property.

Fields of Application

- On damaged concrete columns, beams, walls and other structural elements,
- To reinforce construction with filling the static cracks of concrete, stone and brick.

Features and Benefits

- High diffusion ability due to the low viscosity
- Provides excellent adhesion with filling the holes on system without losing volume.
- Can be injected into humid concrete.

Technical Data

Content	Epoxy resin	
Mixture Density	1,00 – 1,10 (g/cm³ , 23°C)	(DIN EN ISO 2811-1)
Viscosity	300 - 400 mPas	
Mixture Rate	A/B 75/25 (by weight)	
Tensile Strength (N / mm²)	22 ~ 27	(DIN 53504 TS 1967)
Tensile Elongation (%)	9 – 11	(DIN 53504 TS 1967)
Pull-Off (N/mm²)		(EN 1504-3)
Capillary absorption and	<0,1 kg\m². h0,5	(EN 1504-3)
permeability to water		,
Compressive Strength (N/mm²)	42 ~ 44 (1th day)	(EN 1504-3)
	52 ~ 57 (7th day)	,
	•	
Pot Life	60-80 minutes /23°C,200 g.	(DIN 16945)
Curing Time		,
Dust free drying	3-4 hours (at 23°C)	
Touch dry	8-10 hours (at 23°C)	
Full curing	7 days (at 23°C)	

Reinforcing Purpose, Epoxy Based Injection System

Chemical Resistance	
sulfuric acid (H2SO4) %10	3-2
sulfuric acid (H2SO4) %20	2
hydrochloric acid (HCL) %10	3-2
hydrochloric acid (HCL) %20	3-2
nitric acid (HNO3) %10	3-2
nitric acid (HNO3) %20	2
Acetic Acid (CH3COOH) %10	3-2
Acetic Acid (CH3COOH) %20	2
Lactic Acid (CH3CHOH-COOH)%10	2
Lactic acid (CH3CHOH-COOH)%20	2-1
Formic Acid (HCOOH) %10	2
Formic Acid (HCOOH) %20	2-1
Xylene	2
Ethanol	2
Solvent Naphtha	2
(3*highly strength, 2*durable, 1*weak)	
GTIP No	3907.30.00.00.00

Application Procedure

<u>Preparation of Substrate</u>

Cracks, which became apparent on the surface should be opened with a handheld grinder in a reverse cone shape with the dimensions of 5-10 mm in width and 10-12 mm in depth. Dust and other contaminants must be removed with pressurized air.

Application Method

Packers help **EPOX IN 25** epoxy resin to penetrate into the cracks throughout the concrete. Packers are inserted into the holes with a drill. **EPOX IN 25** is injected into the packers through the nozzles. Usually drill packers are used. Injection operation is done with special pumps (with single or double heads). **EPOX IN 25** should be used with a single headed pump, if applied quickly. Otherwise a double headed pump is necessary. The operation pressure shouldn't exceed 5 bars. Usually when injection starts through one packer it continues till **EPOX IN 25** comes out of from the closest

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packer or packers. **EPOX IN 25** (epoxy resin) doesn't move on with the help of pump pressure, it moves with own pressure throughout capillary veins.

Consumption

Depends on usage area.

Packaging

A component: 15 kg + B component: 5 kg = 20 kg set

Shelf Life

12 months in original, unopened package.

Storage

Store in dry area between +5°C and +35°C. Protect from heat, freezing and direct sunlight.

Cleanup Information

Clean tools and equipment with industrial type solvents immediately after use. Dried material can only be removed mechanically.

Cautions / Limitations

- It may be harmful with skin contact.
- Do not apply in freezing conditions or during precipitation.
- Protect applied materials from rain, freezing, foot traffic and continuous high humidity until completely dry.
- Do not use when air and surface temperatures are below +10°C and above +35°C.
- Avoid heavy traffic for 24 hours.

Health and Safety

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Warning! Cause eye and skin irritation. If eye or skin contact, get immediate medical attention. If swallowed, do not induce vomiting. Call a physician or poison control center. Never give anything by mouth to an unconscious person.

Wash hands thoroughly after handling. Wear protective clothing, gloves, eye and face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Dispose of unused, contents, container and other contaminated wastes in accordance with local, state, federal and provincial regulations.

Keep container closed when not in use. Keep out of the reach of children.

Limited Warranty: This product is subject to a written limited warranty which can be obtained free of charge from BAUMERK Company. Please contact with technical service department for further information and support.

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