

TechnoInject™ ER

Epoxy Resin

PRODUCT DESCRIPTION

TechnoInject™ ER is a two-component, 100% solids, high strength, solvent-free epoxy resin for crack injection. Due to its high rate of penetration into porous substrates and excellent adhesion to concrete and masonry, EIR™ provides for permanent bonding even of smallest cracks and restores structural integrity.



Buildings
Structures



Transportation
Infrastructure



Water &
Wastewater



Oil, Gas &
Industrial



Waterfront
Structures



Industrial
Facilities

TECHNICAL DATA

	Unit	TechnoInject™ ER
Tensile Strength	MPa	60.1
Elongation at Break	%	2
Compressive Yield Strength	MPa	104
Compressive Modulus	GPa	2.5
Heat Deflection Temperature	°C	60

PHYSICAL PROPERTIES

Chemical Base	Epoxy resin	
Net Weight	kg	Component A = 20, Component B = 3.0 Component A = 10, Component B = 1.5 100: 15
Mixing Ratio	%	Part A: 100 Part B: 15
Color	Component A is clear to pale yellow Component B is yellow Mixed product is clear to pale yellow	
Viscosity	cps	Part A 300 Part B 100 Mixed 200

ADVANTAGES

- Low-viscosity consistency for deep penetration of concrete cracks.
- Good chemical resistance to protect concrete slabs and decks.
- Resistance to creep and stress.
- Low odor formulation.
- Shrinkage free hardening.
- High mechanical and fatigue strength.
- Cures even under dynamic stress.

TYPICAL USES

- Pressure-inject horizontal, vertical or overhead cracks for a structural repair of concrete & masonry structures.
- Mix with aggregate to repair concrete spalls and voids as an epoxy repair mortar.
- Use to fill and seal voids and cracks in structures such as bridges and other civil engineering buildings, industrial and residential buildings, columns, beams, foundations, walls, floors and water retaining structures.
- Bonding of structural elements
- Consolidating steel sheet injection.
- Solidification of hollow core screed.
- Injection of construction joints.
- Solidification of open-poured concrete structures.

INSTALLATION PROCEDURE

PREPARATION OF SUBSTRATE

- For retrofitting applications, substrate preparation can highly effect on the quality of the systems. The All surfaces must be cleaned from dirt, grime, dust, curing compounds, oils, grease, waxes and all the other contaminated materials that will prevent the epoxy from bonding to the surface.
- An industrial vacuum cleaner must be used to remove dust and dirt. The All the surfaces need grinding,



sandblasting, shot blasting, pressure wash or other common mechanical methods to reach an even concrete substrate.

- Note that concrete surfaces must be fully dried or cured so adhesive can properly dry.
- Clean drilled holes with a cylindrical bristle brush to remove loose material and then blow clean with oil-free compressed air.
- Surface temperatures must be minimum of 40°C at time of application

APPLICATION

Apply material in accordance with established industry procedures and use only trained personnel with experience in pressure injection application. Continue to inject until the crack is completely filled. Allow for adequate cure of the epoxy adhesive before the repaired structures is returned to service.

MIXING

Epoxy compounds are usually supplied in two different containers. Before pouring the contents of component B into contents of component A, each part should be stirred separately to avoid depositing container. Then part A and B should be mixed together depending on the required quantity. Process of mixing should take 2-3 minutes with a low speed mixer. Mix thoroughly to achieve a uniform color. After mixing resin and hardener, you'll have about 30 minutes' time to apply the material. Clean mixing tools with a proper towel to reuse them

CAUTION

Epoxy resin adhesive may cause skin and eye irritation and sensitization so use of chemical resistant gloves and safety goggles is recommended. Close container after each use. Avoid breathing vapors and dust. Get medical attention if you are breathing with difficulty. Keep out of the reach of children.

FAIRST AID

Skin

Wash fibers off skin with water and soap. If fibers are embedded in the skin, remove with tweezers. Discard clothing that may contain embedded fibers. Seek medical advice if exposure results in adverse effects.

Eyes

Immediately flush with a continuous water stream for at least 20 minutes. Washing immediately after exposure is expected to be

effective in preventing damage to the eyes. Seek medical advice.

Inhalation

If there is inhalation exposure to the fibers of this product, remove source of exposure and move victim to fresh air. If victim is not breathing, give artificial respiration. If there is breathing difficulty, give oxygen. Seek medical advice for any respiratory problems.

Ingestion

Ingestion is not a likely means of exposure for this product. If ingestion does occur, do not induce vomiting. Give nothing by mouth if victim is unconscious. Seek medical advice.

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