

GS Epoxy Inject

Low viscosity epoxy resin with long pot life for crack injection

DESCRIPTION

GS Epoxy Inject is a low viscosity epoxy resin-based crack injection resin system long mixed pot-life designed for sealing cracks in concrete and restoring its structural integrity.

Recommended Uses

- Stabilized cracks in structural members
- Sealing of cracks from 0.1mm to 10mm
- Unfilled voids behind tiles or stone facades
- Bonding of steel plates to concrete
- Rapid structural repair of concrete
- Grouting dowels

ADVANTAGES

- **Solvent free** - Low VOC and non-shrink
- Pre-proportioned packaging - No job site errors
- **Low viscosity** - Easy to inject into fine cracks
- **High bond strength to concrete** - Can restore the structural integrity of the concrete
- **Cures hard at low temperatures** - Wide application range
- **High heat deflection temperature** - Suitable for high ambient temperature environments

Packaging and Colour:

GS Epoxy Inject is available in 5,10 kg double pack.

GS Epoxy Inject is available in transparent Color.

APPLICATION GUIDELINES

Surface preparation

Remove all grease, oil, dust, residual curing compound, mould release agent or other contaminant that could impair adhesion of the injection ports. The injection ports should be applied over 6-10mm diameter holes drilled at least 50-75mm into the concrete element. For deeper penetration deeper holes should be considered. Use repair epoxy to adhere the injection ports over the holes ensuring that the adhesive does not block the drilled holes. Allow the Repair Epoxy to cure before injecting. The ports should follow the crack at intervals of 500mm or a maximum of 1m centers. Inject from the lowest point or furthest point towards the center checking for resin coming out of the next hole along. For detailed instructions on crack injection ask representative for the "GS Epoxy Inject guide to crack injection".

Mixing

Proportion part kits accurately mixing only what can be used in less than 30 minutes. Thoroughly stir Part A, add Part B and blend thoroughly using a slow speed mixer fitted with a suitable paddle.

Performance Data

Mixed resin and hardener only	
Viscosity (25°C)	270±50 cps
Compressive Strength (ASTM C579)	65 MPa @ 1 day
70 MPa @ 7 days	
Flexural strength (ASTM C 6319 part 3)	45 MPa @ 1 day
55 MPa @ 7 Days	

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Tensile strength (ASTMD638) 7 days	18 MPa
Pot life	50 minutes @ 25°C
	30 minutes @ 40°C
Slant shear bond strength (ASTM C 882 @ 7 days)	>18 MPa (Concrete failure)
Bond strength	>2.5 MPa (concrete failure)
Tack free time	6.5 hours @ 25°C
Meets the requirements of ASTM C881 Type 1 & 4 Grade 1 Class B & C	

PROPERTIES

Supply Form	Liquid	Liquid	Liquid
Colour	Clear	Amber	Pale Yellow
Mix Ratio	77:23 pbw		
Density (Mixed)	1.05 kg/L		
Application Temperature	15°C - 35°C		

CURING

Cure time will vary depending on the ambient temperature, quantity mixed and placed. **GS Epoxy Inject** will have fully cured after 7 days at 23°C

SHELF LIFE

GS Epoxy Inject can be stored in tightly closed original containers for 12 months at moderate temperature.

HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Reseal containers after use.

GS Epoxy Inject should be handled to minimize dust formation during mixing. Use a light mask if excessive dust is unavoidable. For further information refer to the material safety datasheet.