

Sino-Sina Building Materials Co., Ltd

JGN804 Crack Injection Resin Technical Data Sheet

Product Description

JGN804 is a two-component modified epoxy low-viscosity liquid adhesive designed for filling and repairing concrete cracks. It features low viscosity, low heat release, long pot life, and a simple perfusion process, making it ideal for grouting concrete cracks (0.1-1.5mm) and internal defects like honeycombs and holes.

Applications

Primarily used for concrete crack repair in ballastless tracks via non-pressure injection or low-pressure grouting methods. Suitable for micro-crack penetration and structural strengthening.

Features and Benefits

- Low viscosity for strong penetration into 0.1mm cracks.
- Excellent anti-aging and resistance to acids, alkalis, and water.
- Solvent-free with no shrinkage upon hardening.
- Superior toughness and impact resistance after curing.

Technical Data

Conforms to Category I Grade A Adhesive per GB50278-2011.

Colloidal Properties

Property	Requirement
Tensile Strength (MPa)	≥ 25
Tensile Elastic Modulus (MPa)	$\geq 1.50 \times 10^3$
Elongation (%)	≥ 1.7
Flexural Strength (MPa)	≥ 30 (no cracking)
Compressive Strength (MPa)	≥ 50
Unconstrained Linear Shrinkage (%)	≤ 0.3

Adhesion Properties

Property	Requirement
Steel-Steel Tensile Shear Strength (MPa)	≥ 15
Steel-Steel Butt Joint Tensile Strength (MPa)	≥ 20
Steel-to-Dry Concrete Tensile Bonding Strength (MPa)	≥ 2.5 (cohesive failure of concrete)
Steel-to-Wet Concrete Tensile Bonding Strength (MPa)	≥ 1.8 (cohesive failure of concrete)

Packaging and Storage

- Packaging: Component A: 9kg/drum; Component B: 3kg/drum.
- Shelf Life: 12 months when stored in a cool, dry place.

Application Instructions

1. Inspect crack: Ensure $>0.2\text{mm}$ width and dry surface.
2. Clean surface: Remove debris; use alcohol/acetone for cracks.
3. Install bases: Bottom to top, 300mm spacing.
4. Seal cracks: Use sealant, leave observation port.
5. Check seal: Verify no leaks.
6. Mix adhesive: Per ratio, prepare as needed.
7. Inject: Until overflow from port (0.5-1 hour).
8. Cure: Remove injector; cure for 12 hours.

Safety Precautions

Wear protective gear. Avoid skin/eye contact. Store away from heat.

Contact Information

Website: www.zrete.com

Email: info@wcrete.com

Phone: +86 15373872353