

HP-1 Epoxy Injection Resin - Product Manual

(English)

Overview

HP-1 is a low-viscosity epoxy injection resin with high strength, ideal for deep penetration in concrete crack repair while delivering compressive strength over 40 MPa perfect for temperature-induced cracks, foundation stabilization, tunnel filling, and dam sealing.

Applications

- Repairing temperature difference cracks in large concrete structures after pouring.
- Soil stabilization for foundations to enhance load-bearing capacity.
- Void filling in tunnels, subways, and public buildings for structural sealing.
- Crack filling and water-stopping in hydraulic dams and water conservancy infrastructure.
- Reinforcement of bridges and buildings against environmental stresses.

Key Features

1. Low viscosity under 30 mPa.s for superior penetration, yet compressive strength over 40 MPa for robust repairs.
2. High tensile strength above 5.0 MPa at this viscosity, boosting durability in dam crack filling.
3. Wet bond exceeding 2.0 MPa, ideal for moist tunnel void filling without strength loss.
4. Elongation over 300

Product Details

The HP-1 variant provides tailored performance for fine crack repairs with high strength at low viscosity.

Performance Specifications (Compliant with JC/T 1041-2007)

Item	Index
Density (g/cm ³)	>1.00
Viscosity (mPa.s)	<30
Operable Time (min)	>30
Compressive Strength (MPa)	>40
Tensile Strength (MPa)	>5.0
Bending Strength (MPa)	>10
Dry Bond Strength (MPa)	>3.0
Wet Bond Strength (MPa)	>2.0
Tensile Shear Strength (MPa)	>1.0
Elongation at Break (%)	>300

Packaging & Storage

- Packaging: Standard kits with Component A (9 kg/barrel) and B (3 kg/barrel); mixing ratio A:B = 3:1 by weight. - Storage: Cool, dry place; shelf life 12 months.

Construction Guidelines

1. Prepare surface: Clean cracks of debris. 2. Mix resin: Combine components per ratio. 3. Inject: Use equipment to fill cracks from lowest point. 4. Cure: Allow 24-48 hours, avoid load during this period. 5. Safety: Wear PPE; ensure ventilation.

Contact Information

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