

HP-4 Epoxy Injection Resin - Product Manual

(English)

Overview

HP-4 is a medium-viscosity epoxy injection resin with high strength, offering precise placement with compressive strength over 40 MPa ideal for hydraulic dam crack filling, water-stopping, foundation stabilization, and tunnel repairs in concrete infrastructure.

Applications

- Crack filling and water-stopping in hydraulic dams and reservoirs.
- Repair of temperature cracks in large concrete elements after pouring.
- Soil injection for foundation stabilization and settlement prevention.
- Void filling in tunnels, subways, and public buildings.
- Structural reinforcement in bridges against water and load damage.

Key Features

1. Medium viscosity under 200 mPa.s for precise flow, with compressive strength over 40 MPa.
2. High tensile strength above 5.0 MPa at medium viscosity, suited for tunnel void filling.
3. Wet bond over 2.0 MPa, effective in damp foundation stabilization.
4. Elongation exceeding 300% , providing flexibility for temperature crack repairs.

Product Details

The HP-4 variant offers performance tailored for crack sealing with high strength at medium viscosity.

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

Item	Index
Density (g/cm ³)	>1.00
Viscosity (mPa.s)	<200
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 cracks for HP-4 injection in hydraulic dam crack filling, ensuring high-strength seals. 2. Mix and apply to temperature cracks, using medium viscosity for precision. 3. For foundation stabilization, inject into soil voids and allow 24-48 hour cure. 4. Use in tunnel filling where wet bond strength excels in moist settings. 5. For subway repairs, leverage elongation for flexible, durable results.

Contact Information

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