HIGH-TECH CHEMICALS

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PU RESIN SEAL DRY

TECHNICAL DATA SHEET

Water-reactive polyurethane injection resin for permanent sealing of cracks and joints

PRODUCT DESCRIPTION

HIGH TECH PU RESIN SEAL DRY is a low viscosity, water reactive polyurethane resin used for structural crack injection and permanent sealing of dry and wet cracks in concrete. On contact with water, it reacts and forms a highly elastic, closed cell foam that expands slightly and effectively seals the crack, stopping further water ingress. It provides long lasting, flexible and durable performance.

ADVANTAGES

- ✓ Water reactive – forms flexible polyurethane foam.
- ✓ Permanently seals active leaks and dry cracks.
- ✓ Low viscosity for deep penetration.
- ✓ Slight expansion for effective sealing.
- ✓ Resistant to water pressure and environmental conditions.
- ✓ Excellent adhesion to concrete and masonry.
- ✓ Suitable for dry, damp and wet conditions.
- ✓ Non-shrink, durable and long lasting.

APPLICATIONS

- Sealing of active and dormant cracks in concrete structures.
- Water stopping in basements, tunnels, retaining walls and reservoirs.
- Sealing of construction joints and expansion joints.
- Sealing around pipe penetrations and tie rod holes.
- Waterproofing of tanks, lift pits and other water retaining structures.

TYPICAL PROPERTIES

PROPERTY	VALUE
Appearance	Amber colored liquid
Viscosity (25°C)	Approx. 200 – 400 cps
Density (25°C)	Approx. 1.10 ± 0.05 g/cm³
Specific Gravity	Approx. 1.10
Flash Point	> 100°C
Reaction with Water	Forms polyurethane foam
Expansion Ratio	Approx. 10 – 20 times
Gel Time (20°C)	30 – 60 seconds
Tack Free Time	4 – 6 minutes
Curing Time	45 – 90 minutes
Full Cure	24 hours

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APPLICATION GUIDELINES

SURFACE PREPARATION

Concrete surface must be clean, sound and free from dust, oil, grease, laitance or loose particles. Remove any weak or deteriorated concrete. Identify the location and path of cracks or joints. Install injection packers at suitable intervals.

MIXING

PU RESIN SEAL DRY is a single component resin and is supplied ready to use. Do not dilute. Stir well before use.

INJECTION PROCEDURE

1. Install packers along the crack at 10 to 15 cm spacing.
2. Start injection from the lowest packer.
3. Inject steadily until resin flows from the adjacent packer.
4. Close the first packer and move to the next one. Repeat the process.
5. After completion, allow the resin to react and cure completely.

NOTE:
The size of the crack, water flow and temperature affect the reaction time and expansion.

TECHNICAL SPECIFICATIONS

PROPERTY	VALUE
Viscosity (25°C)	Approx. 200 – 400 cps
Density (25°C)	Approx. 1.10 ± 0.05 g/cm³
Specific Gravity	Approx. 1.10
Water Contact (Gel Time)	30 – 60 seconds
Foam Expansion	Approx. 10 – 20 times
Tack Free Time	4 – 6 minutes
Final Cure	24 hours
Application Temp.	10°C to 40°C
Service Temperature	-20°C to +80°C
Shelf Life	12 months

COVERAGE

Consumption depends on the width, depth and condition of the crack.

As a guide:
1 kg of resin is sufficient to treat approximately 5 to 8 meters of crack (10 mm x 10 mm) in concrete.

STORAGE

Store the material between 5°C and 30°C in original sealed packages.
Protect from direct sunlight and moisture.
Keep away from heat and open flame.

PACKING

Available in 1 kg, 5 kg and 10 kg combi packs (A + B).

SHELF LIFE

12 months from the date of manufacture when stored in unopened containers under recommended storage conditions.

SAFETY PRECAUTIONS

- Consult Safety Data Sheet (SDS) before use.
- Wear protective gloves and goggles.
- Avoid contact with skin and eyes.
- In case of contact, wash with plenty of water and seek medical advice.
- Use in well ventilated areas.
- Keep out of reach of children.