

KESARI INJECT PU 1



TECHNICAL DATA SHEET

DESCRIPTION

Kesari inject PU 1 is a high-performance, hydrophobic polyurethane-based injection grout. It is single component, moisture-activated and MDI (methylene diphenyl isocyanate) blended polyurethane injection grout designed for sealing persistent water leaks from large cracks or leaking joints in concrete structures. If contact with water, it reacts rapidly to produce a closed-cell, rubber-like foam that expands up to 27 times its original volume. The hardened foam does not shrink, swell, or degrade. This innovative system is ideal for stopping active water leaks and acts as a permanent water barrier, even under pressure.

PRODUCT USES

Kesari inject PU 1 is recommended for a variety of civil and structural repair applications, including:

- Defective concrete (cracks, honeycombs, and porous areas)
- Sealing concrete joints, limestone, and brickwork
- Pipe penetrations and wastewater tank repairs
- Waterproofing in tunnels, dams, metros, manholes, and utility structures
- Soil stabilization and underground waterproofing
- Foundation leakage arrest, curtain grouting in basement walls, and elevator pit waterproofing

PRODUCT ADVANTAGES & FEATURES

- Suitable for negative-side applications
- Deep penetration into narrow or fine cracks
- Foam increases in volume to fill cavities and voids
- Excellent adhesion to substrates
- Maintains dimensional stability after curing
- Good adhesive strength, tolerant of movement
- Does not generate new cracks post-application
- Non-corrosive, chemically stable and inert
- Fast reactivity, minimal rebound, long-lasting sealing performance, compatible with most PU grouting equipment

TYPICAL PROPERTIES:

Form	Liquid Type
Color	Dark Brown
Solubility in Water	Hydrophobic
Density (g/ml)	1.12+/-0.02
Mixing Ratio	Ready to use
Viscosity	100-200 mPa·s
Max. Expansion (25°C)	2000-3000 %
Induction Time (reaction time)	15-20 sec
Gel Time (25°C)	80-90 sec
Tensile Shear Strength	(23°C) 4 N/mm ²

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Appearance	Light yellow Polyurethane Foam
Corrosiveness	Non-Corrosive
Chemical Resistance	Resistant to most organic Solvent, Mild Acids, Alkali

HANDLING AND SAFETY

Keep the containers tightly sealed when not in use. Avoid skin contact and inhalation of fumes (if any). While spraying it is advised to wear a mask. If it comes in contact with the body, wash affected parts by plenty of water. In case of persistent irritation contact a physician.

ENVIRONMENTAL PERFORMANCE

Kesari inject PU 1 demonstrates excellent environmental compatibility, making it suitable for green building projects and sustainable construction practices. Key environmental attributes include:

- Low VOC formulation
- Free from heavy metals and hazardous air pollutants
- Non-toxic once cured – safe for human and environmental contact
- Eco-friendly packaging

SHELF LIFE

1 year in a tightly sealed container stored between 0°C to 30°C. After opening, can be reused within 3 months if kept sealed and moisture-free.

PACKAGING

Available in 5 kg Kit