



Lease Life
to Man-Made
Structures

SUPERSHIELD

INJECT 6870

Hydro Expansive Polyurethane Injection Resin



PRODUCT DESCRIPTION

SUPERSHIELD INJECT 6870 is a polyurethane resin based on MDI (Methylene Diphenyl Diisocyanate). It features a low viscosity and expands upon contact with water into a flexible foam that does not shrink. SUPERSHIELD Inject 6870 penetrates deeply into joints and cracks, reacting with water to form a flexible, closed-cell foam that accommodates micro-movements. It expands by 800% and is resistant to water, weak acids, alkalis, and microorganisms. The resin adheres well to concrete, cement, bricks, mortars, metals, and some plastics. Reaction speed is controlled by 6-10% catalyst, ensuring good cell formation.

AREAS OF APPLICATION

SUPERSHIELD INJECT 6870 is ideal for sealing and ensuring water tightness in cracks, joints on walls and floors, concrete constructions, and sewer systems.

TECHNICAL DATA

General Characteristics	
PROPERTY	VALUE
Color	Yellow
Specific Gravity	1.08 Kg/l
Viscosity Resin	105 mPas
Viscosity Catalyst	36 mPas
Free Expansion	800%



Reaction Time : 90 g resin + catalyst + 20 g water

	% Catalyst	Start reaction	End Reaction
10 °C	2 %	45 "	2' 25 "
	6 %	22 "	1' 11 "
	9 %	16 "	59 "
15 °C	2 %	37 "	2' 27 "
	6%	19 "	51 "
	9%	15 "	44 "
20 °C	2%	36 "	2' 15 "
	6%	18 "	54 "
	9%	14 "	30 "
30 °C	2%	27 "	2 "
	6%	17 "	40 "
	9%	12 "	29 "



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APPLICATION GUIDELINES

Thoroughly mix the SUPERSHIELD INJECT 6870 resin with 6-9% of the INJECT 6870 CAT catalyst. Inject the mixed resin into cracks using a one-component pump. Due to its low viscosity and expansion during the polymerization phase, the resin penetrates deeply into cracks. Upon contact with water, it forms a flexible polyurethane foam. Regularly clean the pump and equipment if breaks exceed 15 minutes or after each use, utilizing SUPERSHIELD PUMP CLEANER and rinsing with a quarter litre of the cleaner afterwards.

HEALTH AND SAFETY

To ensure safety, avoid direct contact with skin and eyes. Always wear safety glasses, gloves, and protective clothing. In the event of contact with eyes, rinse immediately with water and seek medical advice. If resin contacts skin, rinse thoroughly with water. Manage spills by absorbing them with sand and disposing according to local regulations. Be aware that the resin reacts with water and air moisture, generating CO₂ gas which can pressurize opened containers. For detailed safety information, consult the safety data sheet.

STORAGE

The components of SUPERSHIELD INJECT 6870 are stable when stored properly but are sensitive to temperature and humidity. Always store these products between 30°C and 70°C. Finish open barrels quickly or repackage them with nitrogen to prevent moisture penetration. Clean pumps with SUPERSHIELD PUMP CLEANER. SUPERSHIELD INJECT 6870 has a shelf life of 12 months if stored as recommended.

PACKAGING

SUPERSHIELD INJECT 6870: 25 Kg Container
SUPERSHIELD INJECT 6870 CAT (Catalyst): 2.5 ltr

WARRANTY

Supershield warrants that its products will be free from material defects and will comply with the specifications provided in their respective technical data sheets. If any product is proven to be defective, Supershield's liability will be limited to the replacement of the product. Supershield will not be liable for any incidental or consequential damages. No other warranties, express or implied, shall apply, including warranties of merchantability or fitness for a particular purpose. It is the user's responsibility to determine the suitability of the product for their intended use and to assume all risks and liabilities associated with its application. Supershield reserves the right to alter the properties of its products without prior notice.