



MAXURETHANE[®] INJECTION FLEX

DESCRIPTION

MAXURETHANE INJECTION FLEX, MIF, is a water reactive, non hydrophilic but hydrophobic polyurethane resin, thus the resulting foam does not absorb water and will not be affected by water dryness: it will not shrink or swell. The gel time of the product is adjustable by adding a certain percentage of the catalyst MAXURETHANE INJECTION FLEX CAT, MIFC.

USES

- Water cut-off in:
 - Defective, cracked or honeycombed concrete.
 - Sealing construction and expansion joints in concrete.
 - Brick constructions.
 - Waste water tanks and drinking water reservoirs.
 - Sewers. Manholes. Utility boxes. Tunnels. Dams.
 - Penetrating pipes.
- Filling of large cavernous spaces and cracks in stones or concrete structures.

ADVANTAGES

- Just requires single-component injection equipment. It reacts with the flowing water or humidity present in the soil.
- Low viscosity, even during injection procedure, which ensures good and deep penetration.
- High performances. Water will not dilute it.
- High expanding ratio, up to 15 times.
- Non shrink.
- The stability of the chemical structure of the foam provides high durability, high mechanical strengths, and capability to withstand heavy water pressures.
- Environmental friendly.

APPLICATION INSTRUCTIONS

See general technical recommendations for injection procedure detailed in the "Introduction to MAXURETHANE INJECTION system".

MIF and MIFC are supplied separately to allow adjustment of the gel time and to provide a longer shelf life. Pour the accelerator on the resin.

A mixing ratio from 2% to 10% of accelerator / resin is recommended, being the optimum proportion checked on site: In critical high pressure water intrusions will react aggressively on contact with water when catalysed at 10%. A slightly catalysed product at 2% assures on the opposite good penetration results when injecting very fine capillary cracks.

Observe temperature and humidity of the environment because both will determine the pot life of the already mixed batch. The higher temperature and relative humidity, the less accelerator is required. Since MIF can react with the humidity of the air, it is advisable to prepare the mixture –in particular the addition of the accelerator- only immediately before the injection is about to start. Mix just the quantity that the equipment is capable to inject in a reasonable time depending on the conditions. Nevertheless, already mixed and catalysed resin could be stored for a few days in bottles or pails if perfectly closed.

Since MIF component reacts mainly with the moisture existing in the substrate to be injected, the system is suitable for single component injection equipment. Hydrophobic resins do not need large amounts of water for the reaction unlike hydrophilic materials: simultaneous injection of water is not necessary. Only if the area of application seems to be dry, pre-injection of water is recommended.

It is essential to keep the equipment absolutely dry. Prevent any moisture from getting in contact with the mixture to avoid premature reaction of the product. If the reaction of the batch occurs while pumping immediately shut down machine and flush with MAXURETHANE INJECTION CLEANER, MIC, to avoid built-up and clogging of the equipment.

CLEANING TOOLS

Tools and mixing equipment are best cleaned immediately after use. DRIZORO provides MIC to avoid built up and clogging of the equipment. Circulate cleaner through pump for several minutes.

SAFETY

Protect your health. Safety goggles, gloves and safety clothing must be worn at all times. While injecting, a full face shield is strongly recommended. Spills and blow outs could happen the same as in any other pressure injection job. In case one of the components comes in contact with skin, wash thoroughly with soap and water. Provide adequate ventilation in volume and pattern in the working area.

ACCESSORIES

DRIZORO supplies injection equipment consisting of manual and electric-drill powered pumps, injection packers and pressure hoses, etc.

PACKAGING

MIF is supplied in 25 kg. and 220 kg. drums.

MIFC is supplied in 5 kg. cans.

MIC is supplied in 25 and 220lt. drums.

STORAGE

6 months in their original, unopened containers, stored in a dry covered place and protected from frost.

TECHNICAL DATA

Physical characteristics of the resin:

Appearance	Yellowish liquid
Solids content (%) DIN 53189	99,7 ± 0,5
Density at 20 °C (gr./cm ³) a 20°C DIN 53217	1,05 ± 0,03
Viscosity at 20 °C (mPa.s) (Brookfield – RVT 2V20rpm) DIN 53 019/1	1000 ± 300
Flash point °C DIN 52785	>200

Physical characteristics of foam (reaction at 20°C and 50% R.H.):

Induction time. CAT 2% / 5% / 10%	80 – 115 sec / 60 – 65 sec / 30 – 35 sec
End of reaction. CAT 2% / 5% / 10%	7 - 15 min / 3 – 4 min / 80 – 90 sec
Expansion rate.	10-20
Toxicity (cured foam)	None
Solubility in water	None
Chemical resistance	Most organic solvents, mild acids, alkali and micro organisms
Shrinkage	None

GUARANTEE

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. DRIZORO reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorised by us. We shall not accept responsibility exceeding the value of the purchased product.



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