

# ECMAGROUT PU F 200

## PU INJECTION FOAM TO STOP WATER LEAKAGES IN CONCRETE

### Description

ECMAGROUT PU F 200 is a hydrophobic, single component, solvent and phthalate free, water reactive polyurethane injection system. It will only react when it comes in contact with water. When in contact with water it will form a relatively stiff polyurethane foam and stops the leak. ECMAGROUT PU F 200 is a single component product with an additional catalyst making it possible to adjust the reaction time as per practical situations. As ECMAGROUT PU F 200 can be seen as a temporarily seal, an after injection to achieve a permanent seal with ECMAGROUT PU R 400, R 420 or R 440 should be done.

### Advantages

- Suitable for hot and cold climates
- Good adhesion to substrate
- Withstands high hydrostatic pressures
- Stable foam when cured
- Application with electric or pneumatic injection pumps
- Cured resin is non toxic
- Suitable for use in contact with potable water.

### Uses

- Rapid sealing of leaking cracks in concrete structures as a temporary water stop

**Reaction Time:** It depends on the product temperature as well as the accelerator dosage. It is recommended to conduct site trials in advance to establish the required reaction time

#### Test Recipe:

100 grams of PU F 200A

X grams of Catalyst F

20 grams of water

#### Mix ratios and approx. foam time at 25°C and 50% R.H

Percentage of Catalyst F	Cream time in seconds	Gel time in seconds
2%	25-30	100-110
4%	17-23	70-80
6%	15-18	50-60
8%	12-15	40-50
10%	10-13	35-45

## Installation Guidelines

ECMAGROUT PU F 200 should be applied by experienced grouting crews. ECMAS provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work. The information below is a summary intended for guidance only. ECMAGROUT PU F 200 is normally carried out through packers installed in holes drilled into the concrete. The holes should be at 45 degree to the concrete surface and intersect the crack at the mid-point of the estimated crack depth.

### Mixing

Pour the contents of the (Part A) into a clean, DRY plastic bucket. Add the required quantity of Catalyst F, refer above table for cream time and gel time in relation to percentage of catalyst, and thoroughly mix manually, or with a slow speed (200 rpm or less) drill fitted with a stirrer for half a minute. Mixing should continue until the liquid is homogenous without streaks. Please refer above table

### Injection Process

ECMAGROUT PU F 200 should be injected using standard injection equipment having a covered reservoir. The injection pressure should be at least 4 bar. Only mix sufficient resin that is estimate to be used for a successful water stopping. Inject packers sequentially. On vertical surfaces start injection at the lowest packer and continue to the next packer etc).

### Cleaning

Injection pumps should be flushed and tools cleaned immediately after use, before the resin sets, using ECMACLEAN. Once the resin has set, it can only be removed by mechanical means.

### Precautions

Recommend to use between 5°C - 45°C. At very low temperatures, it will take longer time to react while at higher temperatures reaction will be much quicker. ECMAGROUT PU F 200 quickly reacts the water away and forms a temporary seal. To obtain a permanent seal another Ecmas Polyurethane product like ECMAGROUT PU R 400, 420 or 440 should be injected after the PU F 200. Polyurethanes are water sensitive. Ensure all equipment and machinery is dry. Avoid skin contact. Do not discard unmixed or partially mixed material into the water system. If any doubts arise concerning temperature, application or substrate conditions, consult the local ECMAS office.

## Technical Specifications

Free Foam Expansion %	3000
Viscosity (mPa.s)	20 to 60
Elongation% (ASTM D 638)	5-15
Intended Use	Temporary water stop
Recommended temperature range	5°C to 45°C

# ECMAGROUT PU F 200

## Packaging

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5.5 kg packs (Part A - 5 Kg, Part B - 0.5 Kg)

## Shelf Life & Storage

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6 months when stored at 25°C and less than 50% relative humidity if kept in a dry store in the original, unopened containers. Once a pack has been opened use immediately. Purging a part pack with nitrogen is essential. Contact ECMAS for more details.

## Health and Safety

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This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Safety Data Sheet (SDS) prior to use this product.

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