

# ECMAGROUT PU F 220

**SINGLE COMPONENT, WATER-REACTIVE, HYDROPHILIC POLYURETHANE INJECTION SYSTEM FORMING AN ELASTIC GEL OR A FLEXIBLE FOAM**

## Description

ECMAGROUT PU F 220 is a Hydrophilic, single component, 100% MDI based, Solvent and Phthalate free, water-reactive Polyurethane injection system which acts as an active water stop system by producing, depending on the amount of water, a flexible foam or an elastic gel

ECMAGROUT PU F 220 has a special characteristic that the reaction time will be between 15 – 45 seconds independent from the amount of water present in the structure

## Advantages

- The cured material remains permanently flexible
- Suitable for hot and cold climates
- Good adhesion to the substrate
- Can withstand high hydrostatic pressures
- The cured material is stable after curing
- Application with electric or pneumatic injection pumps
- Water soluble in uncured state
- Suitable for applications where fluctuating groundwater levels are encountered.
- 100% MDI based and no TDI in it.
- The cured material is non toxic
- The system is suitable for use in contact with potable water

## Uses

- Preventative or remedial water proofing of structures.
- Seal off wet, moist and water containing structures
- For sewer repair and manhole repair, manhole etc.
- Consolidation of loose or unstable soil

## Technical Specification at 25°C and 50% R.H

Property	Typical Results
Viscosity mPa.s	400 - 600
VOC	< 100 g/L
Intended use	Swelling fitted filling of cracks
Allowed min. width of the crack	0.1 mm
Moisture state of the crack	Wet, moist or dripping water
Min and max use temperature	5°C – 45°C
Corrosion behavior	Deemed to have no corrosive effect

## Packaging

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20 kg packs

## Installation Guidelines

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- ECMAGROUT PU F 220 should be applied by experienced grouting crews.
- ECMAS provides detailed method of statements on all its products for use in various applications and must be referred to prior to starting the work.
- The information below is a summary intended for guidance only.
- Detailed information and guidance of pump and packer selection for specific requirements are available from ECMAS
- ECMAGROUT PU F 220 is carried out through packers installed in holes drilled into the concrete.
- The holes should be drilled at 45 degree to the concrete surface and intercept at the mid-point of the estimated crack depth.

## Injection Process

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- The ECMAGROUT PU F 220 should be injected using a standard injection machine having a covered reservoir to avoid moisture coming into the mix.
- Large cracks should be sealed with the fast setting ECMAREP 504 prior to injection. Allow ECMAREP 504 to harden completely before injecting ECMAGROUT PU F 220
- ECMAGROUT PU F 220 is then injected into the holes with a high-pressure pump capable of reaching pressures up to 200 bar. This forces the ECMAGROUT PU F 220 deep into the structure and allows penetration into the smallest cracks.
- Inject the packers sequentially; on a vertical crack start the injection from the lowest packer and continue to the next packer etc.

## Cleaning

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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

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- 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.
- To avoid condensation drums should only be opened when the material in the drum has the same or slightly higher temperature than the temperature on the working place.

## Shelf Life & Storage

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The shelf life is 6 months when stored between 5°C and 35°C with a less than 50% RH in a dry store in original, unopened containers. Once a pack has been opened, use immediately. Purging a part pack with nitrogen is essential. Contact ECMAS for more details.

# ECMAGROUT PU F 220

## Health and Safety

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- These products are for industrial use only by trained operatives.
- Products should be disposed-off according to the local legislation. Refer to the MSDS for general recommendations.
- All persons in contact with the materials (or in the neighborhood of the injection) should wear the appropriate protective clothing, gloves and safety glasses.
- In case of spills and accidents, refer to the MSDS of the products or when in doubt contact your local ECMAS representative.
- Always wear appropriate protective gear for the job at hand according to local guidelines and regulations.
- Protective goggles should always be worn when handling chemical products.
- Please refer to the MSDS for further recommendations prior to use these products.

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