

ECMAGROUT AQUAPU 1K

Aqua-reactive, Expanding, Polyurethane Injection Grout

Description

ECMAGROUT AQUA PU 1K is a single component, low viscous, non-ionic sealing liquid which reacts with water in a controlled manner to form a swelling resilient adhesive, solid in density and strength appropriate to the designed task. When injected under pressure into leaking structures and through the process of polymerization, a permanent flexible water barrier is formed. ECMAGROUTAQUA PU 1K is very effective solution to be the used as last resort, when all conventional grouting methods to stop leakages have failed.

Areas of Application

- To stop water leakage into underground structures (basements, tanks, sumps, pits etc.).
- Soil stabilization for foundations.
- To prevent water ingress, oozing from ground.
- To serve as a water barrier in basements, gravel bedding as damp proof course.
- Preventing leakage in tunnels, deep underground structures, water retaining structures, sewer pipes, concrete cracks and expansion joints.
- Stabilization of abutment and bridge piers.
- Preventing leakage through dams, Solidifying and creating a water barrier in rock and earth fill dams.

Advantages

- ECMAGROUT AQUA PU 1K reacts with saline & mineral water, regardless of temperature and exerts remarkable solidifying properties even in structures where water flow is violent.
- Short gel time produces highly tough, elastic and resilient gel which is chemically stable and non-degradable. This ensures stoppage of water.
- Due to low viscosity, even smallest cracks and pores can be impregnated due to surface-active property and volume increase during reaction.
- It possesses excellent adhesiveness to applied materials.
- ECMAGROUT AQUA PU 1K possesses excellent adhesiveness to soil particles and it is therefore can be useful in landslide prevention. It stops water from oozing and solidifies the ground with high strength.

Technical Specification

Physical Appearance	Pale yellow to yellow viscous liquid
Viscosity @, 25°C cps	800± 200
Specific Gravity @ 25°C	1.08 ± 0.02
Gel Time (Seconds)	40 ± 10



Application Instruction

In case of application by injection method, ECMAGROUT AQUA PU 1K should be pumped by a positive displacement plunger type pump. Inject at slow and even pressure through the injecting nipples till refusal or when the grout oozes out from the nipple immediately adjacent to or above the one being injected.

ECMAGROUT AQUA PU 1 K can be used as such or in diluted form, depending upon the severity of situation and leakage. However, more than 50 % concentrated solution should be injected carefully by experienced application agencies as volume expansion occurs which may damage the weak construction

Handling and Precaution:

- Cured gel of ECMAGROUT AQUA PU 1K is a safe material. However, during injection works, it is necessary to pay attention to safety in handling.
- Do not keep left over material in open condition.
- Clean all tools with any standard solvent before polymerization starts.

Do not use near flame or in hot environment: It should strictly be observed to keep ECMAGROUT AQUA PU 1K containers away from fire or heat.

Ventilation of working Environment: Use only in well ventilated conditions when impregnation works are carried out in confined areas like tunnel and underground sites. If feel uneasy, move to fresh air.

Eye & Skin Protection: PPE like Safety glasses, Industrial Gloves and Safety shoes should be used while using and handling the product. In case of skin contact with the liquid, immediately wash with plenty of water. Liquid got into the mouth or eyes should be flushed out immediately with plenty of water for 15 minutes and seek medical treatment immediately.

Packaging

ECMAGROUT AQUA PU 1K is available in standard packing of 20 kg buckets

Shelf Life

6 months from the date of manufacturing when stored in unopened, original sealed and dry condition at a temperature range from +5°C to 35°C

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