

AQUAGROUT PU

Aqua-reactive grouting compound

DESCRIPTION : AQUAGROUT PU is a low viscosity liquid which reacts with water in a controlled manner to form a swelling resilient adhesive solid in densities and strength appropriate to the designated task. When impregnated under pressure into leaking structures and through the process of polymerization, a permanent flexible/rigid water barrier is formed. The liquid retains its initial low viscosity upon contacting water allowing it to flow without dilution. Once the water reaction commences, the grout expands penetrating into its surrounding and quickly cures to a tough adhesive solid to repel the influence of underground seepage flow and solidify the objective ground which is unaffected by corrosive environments.

FEATURES

- ❖ **AQUAGROUT PU** has a very remarkable solidifying property even in ground where water flow is violent. It stops water from oozing and solidifies the ground with high strength.
- ❖ It exerts successful solidifying property in all types of water, such as sea water, mineral water and that containing slight acid and alkali.
- ❖ It is extremely stable both chemically and physically and will not be damaged by any bacterium.
- ❖ Is completely non-pollutant to the water it contacts and has no effect on potable water, fish or marine life.
- ❖ Possesses excellent adhesiveness to soil particles and is therefore useful in landslide prevention.
- ❖ Does not wash away or is not diluted by the ground water.

USES

- ❖ Prevention of water from leaking into underground structures.
- ❖ Soil stabilization for foundations.
- ❖ Securing tie-back anchors for retaining walls or guys.
- ❖ Serving as sealer or liner in concrete structures.
- ❖ Preventing water from oozing from ground

APPLICATION IN CIVIL ENGINEERING WORK

- ❖ Solidifying and strengthening of ground and rock and stopping water from oozing out.
- ❖ Preventing leakage in tunnels and tunnel segment, deep underground structures and water retaining structures.
- ❖ Stabilisation of abutment and bridge piers.
- ❖ Preventing leakage through dams.
- ❖ Solidifying and creating a water barrier in rock and earth fill dams.
- ❖ Back filling by impregnation for tunnel shield construction.
- ❖ Prevention of crown collapse in tunnels.

APPLICATION METHOD

AQUAGROUT PU is generally pumped as a single component through low pressure hand-operated pumps or special high pressure pumps as required. Hoses are fitted with packers/injection nipples with valve which is sealed against back-pressure with quick-setting cement. The surface is sealed/patched properly to prevent from coming out.

AQUAGROUT PU reacts with water and expands to form a fluid wedge and blocks the leakage. Even gushing leakages can be sealed without it being necessary to block the hydraulic pressure. Due to the low viscosity and expansion during reaction even the smallest cracks, fissures and pores can be impregnated. When water is not present in adequate quantity, to assure the desired reaction, a sufficient quantity of water is also required to be injected.

TECHNICAL DATA

Appearance	:	Pale yellow liquid
Viscosity (cps at 25° C)	:	1300±400
Specific gravity (at 20° C)	:	1.16 ± 0.05
Packing	:	20 kg. drums
Health & safety	:	Non-inflammable & non-toxic.
Storage	:	Store in a dry area. If stored properly in Unopened containers a shelf life of 12 months could be expected.