ArmGrout Inject PU1

(Formerly known as MYK Aquafin P1 (I)

Injection resin for the waterproofing of water-bearing cracks

MYK arment®

TECHNICAL DATA SHEET

Product Description

ArmGrout Inject PU1 resin is a solvent free polyurethane injection material which is used in conjunction with ArmGrout Inject PU1 catalyst. ArmGrout Inject PU1 foams with water contact by high increase in volume and becomes firm visco elastic foam, which seals temporarily against further water penetration. ArmGrout Inject PU1 is resistant against acids and lyes and attacks neither bitumen nor joint tapes. In case of very dry surfaces the material does not foam immediately but it hardens slowly due to the steady addition of existing air resp. soil moisture.

Uses

ArmGrout Inject PU1 is used for the injection of water bearing cracks and joints in concrete and stone.

ArmGrout Inject PU1 is used for

- Stoppage of water inflows from cracks, joints, etc.
- Compacting of loose stones.

Features and Benefits

- Ready to use
- Very high foam volume on water influx
- Rapid, visco-plastic and solid foam formation
- For the temporary sealing of cracks, with penetrating water
- Resistant to a range of acids and alkalis
- Compatible with bitumen

Application Methodology

Instruction for use:
ArmGrout Inject PU1 reacts with the air humidity and with water. Therefore, a skin may form on the surface of the liquid in open cans which does not affect the injection procedure. Generally, ArmGrout Inject PU1 is injected into the water bearing areas by means of injection nozzles and handers. Motor-driven pumps.
When in contact with water ArmGrout Inject PU1 foams up strongly and hardens. If the zone to be waterproofed contains insufficient water, additional injection of water - preliminarily or subsequently – will support the reaction and hardening of ArmGrout Inject PU1. The application is to be affected in accordance with the ZTV-rises or Riled of the Daft (regulations for crack injection).

Recommendation:
We recommend storing the product prior to use for at least 12 hours at a minimum temperature of 15°C in order to ensure the recommended processing temperature of between 15°-30°C.

Application Guidelines:
ArmGrout Inject PU1 is a complete system for void filling and leak sealing in concrete or masonry structures and sandy soils.

Adaptable reaction time is possible by varying the catalyst ratio from between 2% to 10%. Reaction with water results in the formation of a semi - flexible polyurethane foam which is hydrophobic and chemically resistant. The reaction time can beset from 30sec to 12 minutes. (See table of reaction times overleaf.) The pre-mixed resin can be pumped by means of a single component injection pump that is equipped for high pressure. Following the injection, the pump must be thoroughly cleaned with MYK Arment Cleaner.

Note: Always make sure that the material is homogeneous, mix the resin using a dry clean drill and paddle mixer for a minimum of 15 sec before application.

It is recommended that the material be conditioned to appropriate temperatures for at least 12 hours prior to application.

Important: Keep containers sealed whilst not being used. Moisture may be absorbed into the MYK Arment from the atmosphere causing it to react. Careful consideration should be given to applications below 10°C on a falling thermometer to avoid possible crystallisation.

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Physiological Behaviour and Protective Measures:

ArmGrout Inject PU1 is physiologically harmless after complete hardening.
The liquid component is harmful; Symbol XN.

Technical Data

ArmGrout Inject PU1 Resin	
Appearance	Brown liquid
Viscosity at 25°C Brookfield DV 11 spindle no. 2 at 60 rpm	300 - 450 mPa·s
Flash point	> 180°C
Density at 25°C	1.13
Catalyst	
Appearance	Clear liquid
Viscosity at 25°C Brookfield DV 11 spindle no. 2 at 60 rpm	25 - 40 mPa·s
Flash point	> 180°C
Density at 25°C	1.00

ArmGrout Inject PU1 – All tests carried out using the following mix ratio.

ArmGrout Inject PU1: 100 parts by weight

Catalyst: As a percentage of ArmGrout Inject PU1 by weight, as stated in the results.

Water: In all tests, 10 parts by weight.

Cream Time

ArmGrout Inject PU1	1%	2%	5%	10%
10°C	128sec	125sec	41sec	25sec
15°C	100sec	69sec	36sec	24sec
25°C	73sec	55sec	24sec	20sec
35°C	60sec	30sec	25sec	19sec

Rise Time

ArmGrout Inject PU1	1%	2%	5%	10%
10°C	10min	5m:49sec	124sec	78sec
15°C	9min	5m:5sec	120sec	75sec
25°C	8min	4m:45sec	115sec	63sec
35°C	5min	3m:4sec	108sec	60sec

Expansion Rate

ArmGrout Inject PU1	1%	2%	5%	10%
10°C	8X	11X	15X	28X
15°C	9X	14X	20X	29X
25°C	10X	15X	25X	30X
35°C	10X	20X	25X	30X

All technical data stated herein is based on tests carried out under laboratory conditions

Consumption

- Existing cracks (crack width approx. 0.2 mm) have to be bored in a distance of approx. 20 cm.
- The bore holes have to be cleaned with oil free
- Pressure air from the dust.
- Place the injection packers
- Inject ArmGrout Inject PU1 with the suitable injection
- Equipment.
- vertical cracks start the injection from the left side

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Packaging

ArmGrout Inject PU1 is supplied in packs as mentioned below packing size: 5.5 kgs.
(Resin: 5.0 Kg + catalyst: 0.5 kgs)

Storage and Shelf Life

Storage stability in well-sealed drums
Resin: 12 months in original sealed drums.
Catalyst: 12 months in original sealed drums.
These materials are both temperature and moisture sensitive.
Therefore, materials should be stored in an area with temperatures not exceeding 40°C or not lower than10°C.

Annotation

Areas which are not to be treated have to be protected against the influences of ArmGrout Inject PU1. Applications which are not expressively stated in this data sheet may only be done after having contacted our technical department and after having received their written confirmation
Disposal: Liquid remainders: EAK 08 01 11 paints and lacquers containing organic solvents or other dangerous substances Hardened product remainders: EAK 17 02 03 plastics.
See valid EC-safety data sheet.

Health & Safety

It is advisable to wear goggles while spraying. Inhalation of spray should be avoided. When it contacts with skin, should be cleaned immediately. Seek medical advice in case of contact with eyes.

Product Categories Available

Legal Note

MYK Arment Private Limited
(Formerly Known as MYK Schomburg India Pvt.Ltd)
8-2-703/A, 3rd Floor, Leela Gopal Towers, Road No. 12, Banjara Hills, Hyderabad -500 034
Tel: +91 40 6816 0001 | Email: myk@mykarment.com | www.mykarment.com