

PRODUCT DESCRIPTION: Fibgrout PU 2K is a pre-blended CFC free polyurethane polyol for two component (2K) rigid foams for injection grouting purposes. The system gives out a foam with a fine rigid cell structure and good inter-laminar adhesion. The system uses SIPANE as our in-house developed eco-friendly blowing agent. The system is injected via a high-pressure twin piston pump in conjunction with a in-built line mixer nozzle into the cracks/voids of walls, roofs, tunnels, etc. The system foams up irrespective of any water contact in the cracks or voids, with a fast reaction profile. The fast reactivity helps the grout to expand quickly and seal off the water flow of cracks and voids immediately. The reactivity of the system increases as and when the system comes in contact of any water or moisture.

AREAS OF APPLICATION

- Cold storage
- Large voids
- Roofing systems
- Dry fissure grouting
- Foundation stabilization
- Pipe intrusions, Waste water tanks
- Restoration of existing concrete structures
- As a closed cell foam to prevent water leakages
- Tunnels, Dams, Subway (Metro), Sewers, Manholes, Utility boxes, etc.
- Sealing against water ingress, leaking cracks, joints, water in masonry, brickwork etc.
- Thermal insulation of building walls, roofs, tanks, vessels and pipes

ADVANTAGE

- Fast reaction
- Excellent bond to surfaces
- Dose not create new cracks
- Negative side application possible
- Can withstand high hydrostatic pressures
- Deep penetration into very small cracks
- Foam increases in volume to fill cavities and voids
- Good adhesive strength, tolerant of movement
- Inert after curing, constant volume, no shrinkage

APPLICATION

SURFACE PREPARATION

The material should be applied to the prepared surface using Pump that is equipped for high pressure. The mix material react with the water in the structure and foam. The surface is sealed/patched properly to prevent from coming out. Fibgrout PU 2k reacts with water and expands to form a 'fluid wedge' & 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.

Since the chemical reaction is very quick the results are immediately visible. When water is not naturally present in sufficient quantity to assure the desired reaction, a sufficient quantity of water is also required to be injected.

MIXING

FIBGROUT PU 2K mix in the ratio of 1:1 by volume.it should not be diluted under any circumstance. Use appropriate solvent for purge line and flushing of equipment and if spraying stops for a period of time in excess of the pot life of the material. Thoroughly mix part RESIN material with air driven power equipment until a homogeneous mixture and color is obtained.

APPLYING AND LAYING

Mixed material are injected using a two component injection pump , equipped with a suitable static in-line mixer to achieve thorough mixing of the two components during injection.

CLEAN UP

- Clean all tools immediately after use with Fibrex Paint Remover. Do not allow material to harden.

TECHNICAL SPECIFICATIONS

Properties	Value
Fibgrout PU 2K A part Specifications	
Physical State	Liquid
Colour	Transparent Yellow
Specific Gravity	0.95-1.05 (25°C)
Viscosity	250-450 (25°C) cps
Hydroxyl Value	290-320 mgKOH/g
NCO Content	-
Fibgrout PU 2K B part Specifications	
Physical State	Liquid
Colour	Dark Brownish
Specific Gravity	1.23-1.25 (25°C)
Viscosity	200-250 (25°C) cps
Hydroxyl Value	-
NCO Content	30.5-32.5 %

TECHNICAL SPECIFICATIONS

Typical Reaction Characteristics	
Ideal Operated Temperature	25°C
Mixing Ratio (A Part : B Part)	100:100 (PBV)
Cream Time	10-15 seconds
Gel Time	50-70 seconds
End of Rise Time	80-100 seconds
Tack Free Time	<2 minutes
Water/Grout Mix Threshold	~20% PBW
Typical Foam Properties	
Free Rise Density	60 ± 5 kg/m ³
Expansion Ratio	<20 times
Dimensional Stability	1% max
Fire Retardancy (PIR)	B3 (DIN 4102) Class

The above reaction characteristics are achieved in the laboratory tests at 21°C via hand mixing with a mechanical stirrer at 3000 rpm. The overall applied density may also vary depending upon processing conditions, including ambient and substrate temperatures, mixing speed and time, water exposure levels, etc.

PACKAGING

Fibgrout PU 2K
A part (PU Resin) - 10 Kg, 20 Kg
B part (PU Hardener) - 12 Kg, 24 Kg
Or Project Standards

STORAGE

The product must be stored out of direct sunlight, weather, and direct external fire sources. The containers must always be kept sealed against moisture. Ideal storage temperature is approximately 25°C or less. Under these conditions, the product will remain stable for 6 months.

PRECAUTIONS

During mixing and application the following precautions should be observed: ensure adequate ventilation and avoid contact of the material with the eyes, nasal passages, mouth and unprotected skin. Avoid contact with the hands by wearing protective gloves and using,

if necessary, a suitable barrier cream. In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents). Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction. Always wear gloves and eye/face protection as necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice.

DISPOSAL / SPILLAGE

Spillage of any of the component products should be absorbed onto sand or other inert material and transferred to a suitable disposable vessel. Disposal of such spillage or empty packaging should be in accordance with local waste disposal authority regulations.

NOTE

The information supplied in this datasheet is based upon extensive experience and is given in good faith in order to help you. Our company policy is one of continuous Research and Development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products; however as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof.

HEALTH AND SAFETY

This material is intended to be used by trained professionals with proper equipment's. The following safety measures are recommended:

- Wear protective gloves, clothing, goggles, hearing protection for noise reduction and hard hats for falling debris.
- Do not eat, drink or smoke while in active contact with these materials.
- Avoid skin contact.
- Wash hands thoroughly with soap and cool water.
- Never wash the skin with a solvent.
- Anyone experiencing difficulty breathing when working with these materials or showing an allergic reaction should seek fresh air immediately and consult a physician if symptoms persist.

FIBGROUT PU 2K

Two Component Rapid Setting Polyurethane Grout

Product # 114.143
Version no: 29.02.2024

Tech Data

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