

# EAMIGROUT FLEX SEAL

# Low Viscosity Polyurethane Resin for Stopping Flow of Water

### **Product Description**

EAMIGROUT FLEX SEAL is a low viscosity hydrophobic polyurethane that consists a base resin along with an accelerator component. EAMIGROUT FLEX SEAL is typically used to repair leaking cracks & joints in concrete structures. The accelerator is used by the experienced installer to manipulate the reaction profile as warranted by job site conditions.

Being a hydrophobic formulation, when reacted with minimal amounts of water, the resulting foam will maintain its physical form and will repel water not allow it to pass through.

EAMIGROUT FLEX SEAL is a closed cell polyurethane grout that will not shrink under wet/dry cycles.

## **Typical Applications**

- Water Related Facilities.
- Waste Treatment Plants.
- Storm Water Systems.
- Underground Vaults.
- Manhole Facilities.
- Concrete Dams.
- Tunnels.
- Earthen Dams.
- Elevator Pits.
- Parking Garages.

# **Product Features**

- Pumps as a single component.
- Controllable reaction times
- Excellent resistance and durability.
- Outstanding adhesion.
- Non-hazardous shipping.
- Non-flammable.
- Cures in non-toxic permanent seal.

# Guide for Application Application

Remove all loose particles, dust traces of oil, paints dirt from surface of leaking cracks. Drilling injecting holes. Locate rebar and conduit in concrete to be repaired. Drill a 0.8 -1.5 cm. hole (depend on crack size) at a 45 degree. Angle every 40 cm.

Drill at a distance away from the crack to approximately one half the thickness of the concrete. If repairing a vertical surface drill the first hole at the bottom of the crack and work up wards.

Drill few centimeters away from the crack to avoid concrete to break when injecting under pressure.

If repairing a thin concrete element, holes are drilled in the face of the crack, and face should be well sealed to retain pressure, with Epoxy Systems. Install the correct size packer into the drilled holes. Make sure that all packer installed around the crack are well tighten to prevent coming out when under pressure. We recommend the use of 1.0-1.5 cm packers with a male zero fitting and check value, with approximately 5.0 - 6.0 cm in length.

## **Mixing**

Estimate the quantity of EAMIGROUT FLEX SEAL you may use for this crack. Pour the EAMIGROUT FLEX SEAL base in to a clean open top bucket, mix the correct amount of EAMIGROUT FLEX SEAL catalyst at a ratio of 1.5 % by volume by using a slow speed paddle mixing drill or by hand mixing for small quantities. Add the catalyst slowly and mix continuously for 3 min if you add the catalyst quickly, this may cause lumps in the material that may block your pump. Make sure when mixing not to introduce air in the mix. Any surface get in contact with the activated grout before injection should be completely dry, free from moisture, water acts as a catalyst to trigger the reaction.

Now the EAMIGROUT FLEX SEAL is being activated start putting it in the pump to start injection, after flushing the pump with solvent, never flush the pump with water.

# **Technical Properties**

(Liquid Material) **Viscosity** (ASTM D-1638) **Specific Gravity** (ASTM D-1475) Flexible Accelerator Flexible Accelerator 400 cps 1.10 (1.08) 25 cps 0.91 (1.04) Colour Flash Point (ASTM D-92) Flexible Accelerator Flexible Accelerator >200°F 200°F Amber

(Cured Material)

Density (ASTM D-1622) 4 lbs/ft³ Elongation (ASTM D-638) 20% Tensile Strength (ASTM D-638) 10 psi Shear Strength (ASTM D-273) 8 psi Water Absorption (ASTM D-2842)< 1%

# EAMIGROUT FLEX SEAL

#### **Testing Reaction Time**

Pour a small amount of the activated EAMIGROUT FLEX SEAL in a plastic cup, add some drops of water to it and mix. Check how long the reaction will occur, for a standard mix 30 sec. to begin, adjust your reaction time by adding more EAMIGROUT FLEX SEAL base or accelerator to your mix. In cracks where water is strongly flowing we recommend adding more accelerator to increase the reaction time of the EAMIGROUT FLEX SEAL.

#### Injection

Cracks with flowing water is not a problem it is preferable in a vertical wall start injecting from the lowest point working up words. If crack is dry during injection, water could be injected first through the injection packers. Pump EAMIGROUT FLEX SEAL through the injection packer until the hole will not take any more EAMIGROUT FLEX SEAL or it is no longer visibly seeping out of the crack and appears to have stopped traveling Use a pump which attains at least 250 psi or use hand grease injecting pumps for small quantities. After 3 minutes, the Inject Seal have being reacted and the seepage of water should be stopped.

#### Warranty

We warrant our products to be of good quality & manufactured to rigid standards. This Warranty is in lieu of any & all other warranties expressed or implied. This data sheet is published for information only. It is believed to be correct but no liability is accepted for it or the suitability of the product for any particular purpose. EAMIC TRETOL services are free & the company does not accept liability for any loss arising from it. Max liability is limited to substituting the same quality of material .

To permanently seal the crack you may inject more material, 2 or 3 times in each injection packer within 60 min. after initial injection, this will not consume too much grout, always stop when you see the grout coming out of the crack. Allow EAMIGROUT FLEX SEAL to cure then clean all material protruding out of the crack surface.

## Cleaning

Clean up of spillage of spills or leakage with adequate ventilation and appropriate personal protective equipment, cover the spill area with absorbent material such as clay or vermiculite and transfer to metal waste containers. Do not reseal container as reaction of contaminated material can create pressure. Wash area with decontamination solution (5-10% solution of sodium carbonate).

# Coverage

It depends on the volume of the crack, as a general estimation, around 0.5 kg for every 1 meter long of crack.

## **Packaging**

EAMIGROUT FLEX SEAL (two components) in 210 kg -20 kg -5 kg packs.

#### **Storage**

In original unopened container , in a closed non-humid shaded areas..

#### Shelf Life

12 months when stored as recommended.

#### **Health and Safety**

- Use in well ventilated area only, do not smoke during use & avoid breath vapour.
- Avoid skin contact, wear protective gloves, in case of contact, wipe excess liquid from skin and wash with soap and water.
- Avoid eye contact, wear eye protection, in case of contact, flush with large amount of water and get medical attention.



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