

## EAMIGROUT HPY FLEX

### Polyurethane Resin For Stopping Flowable Water

#### Product Description

EAMIGROUT HPY FLEX is two parts liquid polyurethane, which is specially designed to form a closed cell an outstanding water stop flexible barrier when reacting with water.

#### Typical Applications

##### To stop water leaks through:

- Cracks & honey combed concrete.
- Voids between walls & floors.
- Expansion joints.
- Cold joints.
- Around mechanical fittings.

##### To repair leaking concrete in:

- In tunnels & manholes.
- Sewer lines.
- Concrete dams.
- Water concrete structures.

#### Product Features

- Set material is totally non toxic.
- Could be used in drinking water tanks.
- Extremely durable but yet environmentally friendly.
- Reacts rapidly with water.
- Forms a flexible water stop.
- Used when 20% movement is anticipated.
- Expands with an outward pressure sealing smallest cracks.
- Adheres tenaciously to practically all wet or dry substrates.
- Does not shrink after total drying.
- Extraordinary permanent seal for cracks.
- Can expand up to 20 times its original size.

#### Guide For Application

##### Repairing leaking cracked concrete Surface Preparation

Remove all loose particles, dust traces of oil and paints dirt from surface of leaking cracks.

##### Drilling injecting holes

Locate rebar and conduit in concrete to be repaired. Drill (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 drills the first hole at the bottom of the crack and work upwards. Drill few centimeters away from the crack to avoid concrete to break when injecting under pressure. If repairing a thin concrete element, holes have to be drilled in the face of the crack, and the face should be well sealed to retain pressure as when injecting the Epoxy Systems.

##### Installation of Packers

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. The use of (1.0-1.5) cm packers with a male zero fitting and a check valve, ( approximately 5.0 to 6.0) cm in length is recommended .

##### Mixing

Estimate the quantity of EAMIGROUT HPY FLEX you may use for this crack. Pour the EAMIGROUT HPY FLEX base in to a clean open top bucket, mix the correct amount of EAMIGROUT HPY FLEX catalyst at a ratio of 1.5 % by volume by using a slow speed paddle mixing drill or by manual mixing for small quantities. Add the catalyst slowly and mix continuously for 3 minutes.

### Technical Properties

<b>Appearance</b>	Amber
<b>Density (core)</b>	Tested in accordance with ASTM D 1622
<b>Free Rise</b>	32.35 kg/m <sup>3</sup>
<b>Confined</b>	34.7 kg/m <sup>3</sup>
<b>Shrinkage</b>	Tested in accordance with ASTM D 2126 , 1 Day < 0%, 7 Days < 0%
<b>Water Absorption (Volume Confined)</b>	Tested in accordance with ASTM D 2127 Less than 1 %
<b>Shear Strength</b>	Tested in accordance with ASTM C 273 1.2 kg/m <sup>3</sup>
<b>Tensile Strength</b>	Tested in accordance with ASTM D 1623 .....2.06 kg/m <sup>3</sup>
<b>Chemical Resistance</b>	Resistant to most common chemicals, please consult EAMIC Technical Department for details
<b>Viscosity</b>	@ 500 cps
<b>Elongation</b>	Tested in accordance with ASTM D 1623 44%
<b>Percentage Solid</b>	100 %

# EAMIGROUT HPY FLEX

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 gets in contact with the activated grout before injection should be completely dry, free from moisture. Water acts as a catalyst to trigger the reaction. As the EAMIGROUT HPY FLEX is being activated start putting it in the pump to start injection. After finishing, flushing the pump with solvent. Never flush the pump with water.

## Testing Reaction Time

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

## Injection

In case of cracks with flowing water. Start injecting from the lowest point working upwards. If the crack is dry during injection, water could be injected first through the injection packers. Pump EAMIGROUT HPY FLEX through the injection packer until the hole can not take any more grout or grout is no longer visibly seeping out of the crack and appears to have stopped traveling. Use a pump which attains at least 1.72N/mm<sup>2</sup> or use hand grease injecting pumps for small quantities.

## 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.

After 3 minutes the grout would react and the seepage of water should be stopped. To permanently seal the crack you may inject more material 2 or 3 times in each injection packer with in 60 minutes after initial injection, this will not consume too much grout. Always stop when you see the grout coming out of the crack. Allow EAMIGROUT HPY FLEX to cure then clean all material protruding out of the crack surface.

## Finishing

Patch the crack and the injection holes after cleaning with EAMIPAIR CP. Any protruding packers should be cut before patching. Clean the pump thoroughly by flushing it well with a solvent to prevent future blockage in pump.

## Yield

It will depend on the allowed expansion.

## Coverage

It depends on the volume of the crack. Estimated coverage is (0.5 kg -1.00 )kg per1 meter.

## Packaging

EAMIGROUT HPY FLEX (two components) in (20 kg) or( 5 kg) packs.

## Storage

EAMIGROUT HPY FLEX should be stored in a non - humid shaded areas.

## Shelf Life

Six months when stored in its original unopened packages.

## Health and Safety

- Any splashes on skin should be washed with water.
- Seek medical assistance in case of contact with eyes, after washing it with running water.
- Ensure good ventilation and do not smoke during use.

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