saveto Construction Materials

vetonit Product Data Sheet

Vetogrout *UR710*

Hydro-reactive foaming flexible polyurethane injection resin.

Uses

- Stopping crack seeping water.
- Injection of structural elements in water retaining or water excluding structures.
- Crack injection to stop water flow in retaining walls, manholes, reservoirs,...etc.

Product Description

Vetogrout UR710 is a fast and highly reactive polyurethane foam producing resin that reacts when in contact with water to form a flexible closed cell foam barrier inside concrete cracks. Vetogrout UR710 is a two component urethane injection system consisting of the foam resin and an accelerator. The product is re-injectable with Vetogrout UR711 to form a permanent elastic seal in structural elements.

Advantages

- Fast reaction time stopping flowing water under pressure.
- Re-injectable with polyurethane injection resin (Vetogrout UR711).
- Flexible, allows for movement accommodation in live cracks.
- Longer time to clean equipment compared to the market standard

Standards Compliance

- ACI 546R: Guide for concrete repair.
- ICRI Guideline No. 340.1-2006
- BS 6319

Design Considerations

Vetogrout UR710 is designed to stop flowing water in cracked concrete at crack widths of 0.2 to 7mm depending on water flow and pressure. The product is also re-injectable using products such as Vetogrout UR711 and Vetogrout ER717 depending on requirement. Please consult your local Saveto representative.

It can also be used to stabilize soil and create membrane barriers behind retaining walls.

Technical Data

Vetogrout UR710	Typical Values
Specific Gravity	1.15
Pot Life @ 35ºC	3 - 4 hours
Water Reactivity Time	5 -30 seconds
Viscosity	2-3 poise @ 20ºC
Shrinkage (ASTM D2126)	0%

Usage Instructions

Preparation

If water flow permit, clean the surface adjacent to the cracks and remove any dust, unsound or contaminated material, plaster, oil, paint, grease, corrosion deposits or algae.

The surface should preferably be prepared using high pressure water jetting or light abrasive blasting, followed by thorough washing to remove dust and remaining particles. Dirt alone may be removed with wire brushes or similar mechanical means.

Oil and grease deposits should be removed by steam cleaning, detergent scrubbing or the use of a proprietary degreaser. The effectiveness of decontamination should then be assessed by a pull-off test.

Blow the cracks and treated surface with oil free air to ensure complete removal of all dust and loose particles.

Fixing injection packers

The injection packers inserted into pre-drilled holes shall be fixed at intervals along the length of each crack. The distance between each packer will depend upon the width and depth of the crack. Spacing shall be close enough to ensure that the resin will penetrate along the crack to the next point of injection. This will normally be between 200 mm to 500 mm.

Where practical the surface of the cracks between the packers shall be sealed with a band of Vetorep ER350, 30 mm to 40 mm wide and 2 mm to 3 mm thick. Both sides of any cracks which go all the way through a wall or slab shall be sealed in this way.

Please note: Where water flow is severe the Vetorep ER350 application can be omitted.

In the case of a wall or slab which is cracked all the way through, packers shall be located on both sides with those at the back placed at midway points between those at the front.

Where applicable, the Vetorep ER350 shall be allowed to cure for 8 hours at 35ºC. At low ambient temperatures (5ºC to 12ºC) the curing time will be extended and the applicator shall ensure that the epoxy putty surface seal has adequately cured prior to continuing.

One end of the injection hose shall be attached to the lowest packer on vertical cracks or to either end of horizontal cracks. Each crack shall be treated in a single, continuous operations. Sufficient material shall, therefore, be made ready prior to the commencement of the work.

Vetogrout UR710 Application

Thoroughly mix the accelerator with the base resin. Take care to exclude moisture as much as possible and place in an enclosed container after mixing. There will be a skin on the surface but the liquid underneath will be satisfactory for use.

Vetogrout UR710 should be used with standard injection equipment having closed containers. When flowing water has stopped re-inject with Vetogrout UR711 to give a permanent seal. See Vetogrout UR711 data sheet.

Making good

Remove the packers or nipples. Make good any holes or voids with Vetorep ER350 and allow to cure. The epoxy putty can be ground off or softened with a blow lamp and peeled off. Do not allow to burn.

Cleaning

Vetogrout UR710 and Vetorep ER350 should be removed from tools, equipment and mixers with Vetonit Solvent XX400 immediately after use. Hardened material can only be removed mechanically.

Packaging & Coverage

Product	Pack Size	Theoretical Coverage
Vetogrout UR710	5 liter Kit	5 liter yield
Vetorep ER350	1 & 5 kg Kits	1.7 kg/m²/mm
Vetonit Solvent XX400	4 Liter cans	4 liter yield

Shelf Life & Storage

Vetogrout UR710 original sealed containers have a shelf life of 6 months @ 20 ºC provided it is stored clear of ground in a dry shaded and temperature controlled conditions.

If stored at high temperatures and/or high humidity conditions the shelf life may be reduced to 2 to 3 months.

Health & Safety

Vetogrout UR710 contains Isocyanate. May cause sensitization by inhalation. During use avoid contact with skin and eyes and inhalation of vapor. Wear suitable protective clothing, gloves and eye/face protection. The use of barrier creams provide additional skin protection.

Should accidental skin contact occur, remove immediately with a resin removing cream followed by soap and water. Do not use solvent. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting. Use only in well ventilated areas. In case of insufficient ventilation wear suitable respiratory protective clothing.

Vetogrout UR710 and Vetorep ER350 are not flammable. Vetonit Solvent XX400 is flammable, keep away from sources of ignition and direct flame.