

# TREMCO® AQUA-DAM LV

LOW VISCOSITY HYDROPHOBIC POLYURETHANE GROUTING SYSTEM

TECHNICAL INFORMATION

PRODUCT DATA SHEET

**KEY BENEFITS SUMMARY**

- Low viscosity for smaller cracks
- Fast reaction time with added accelerator
- Tenacious bond to wet and dry substrates
- Needs very little water to react and cure
- Remains active when the water subsides
- Excellent elongation to handle moving cracks and joints

**PRODUCT INFORMATION**

**DESCRIPTION**

TREMCO® AQUA-DAM LV is a low viscosity, hydrophobic polyurethane compound that is injected into hairline cracks in concrete and other sound substrates to stop water from entering into occupied or unwanted places. The reaction time of the TREMCO® AQUA-DAM LV is controlled through the use of its accelerator, known as TREMCO®ACCELERATOR.

TREMCO® AQUA-DAM LV forms a water tight seal within the substrate, with very little shrinkage after curing.

**USAGE/PURPOSE**

For waterproofing:

- Sealing fine cracks and joints
- Sewers & manholes
- Can be used in porous soils as a stabilizer
- Below grade walls subject to high water tables
- Wastewater treatment facilities

**PACK SIZE**

19 litre pail

**PRODUCT CODE**

TREMCO AQUA ACCELERATOR

500ml can

TREMCO PUMP RINSE

19 litre pail

TYPICAL PROPERTIES – LIQUID	RESULTS	TEST METHOD
Viscosity @ 25°C	100 cps	ASTM D 1638
Specific Gravity	1.17	-
Physical State	Liquid	-
Colour	Amber	-
TYPICAL PROPERTIES – CURED	RESULTS	TEST METHOD
Density	64kg/m³	ASTM D 1622
Elongation	48%	ASTM D 638
Tensile Strength	0.17 MPa	ASTM D 638
Shear Strength	0.13 MPa	ASTM D 273
Water Absorption	< 1 % by volume	ASTM D 2842

TYPICAL REACTION PROFILE			
AQUA ACCELERATOR PERCENTAGE			
	0%	1.25%	2.5%
Initial Foam	Not recommended	45 seconds	30 seconds
Reaction Time	Not recommended	3 minutes	1 minute 45 seconds

**USAGE GUIDELINES**

**SUBSTRATE PREPARATION**

- To ensure the project is completed properly, clean the exterior of the surface so that the full extent of the crack or joint can be seen. This will aid in proper hole drilling.
- Start by knowing the thickness of the concrete substrate that is to be repaired. This will be used in the spacing of packers.
- Starting at the lowest point of the crack; triangulate the position of the first hole to be drilled, so that it will intersect the crack at a 45° angle, half way through the thickness of the concrete.
- Drill a 16mm hole in this position and ensure that the bit used is long enough to pass through the crack.
- Drill the next hole in the same manner on the opposite side of the crack. The spacing between holes should be equal to the thickness of the concrete.
- Continue to drill holes in the same manner, moving up the crack until the entire length of the crack or joint has an equal chance of receiving the grout

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## SUBSTRATE PREPARATION (cont)

- ❑ Install 16mm injection packers into the drilled holes and tighten.
- ❑ Inject water through the packers to make sure they don't leak around the sides. The water injection will also flush out any dust and debris that is in the crack due to the drilling process.

## METHOD OF APPLICATION

### MIXING

- ❑ Prior to injecting TREMCO® AQUA-DAM LV, properly stir the material and the accelerator. Do not use high speed mixing equipment, for that will "whip" air into the product.
- ❑ Pour the appropriate amount of TREMCO® ACCELERATOR into the TREMCO® AQUA-DAM LV and mix on slow speed for a minute or two, to ensure the accelerator is fully mixed in. The mixing ratios as follows:

TREMCO® AQUA-DAM		DURAL AQUA ACCELERATOR	
Package Size	Standard Amount	Minimum	Maximum
19 litre pail	500ml	250ml	1 litre

### PLACEMENT

- ❑ Once the injection packers have been set and the drilled holes and cracks have been flushed out with water, the injection of the material can begin. Start at the lowest point of a vertical crack and work upwards.
- ❑ Pump TREMCO® AQUA-FIL into the packer until foaming material comes out the face of the crack and starts to approach the next packer. On a horizontal crack, start at the end that was first installed and flushed with water. The more water left in the crack and injection site, the better.
- ❑ Move the injection head to the second packer and repeat until you have moved the entire length of the crack.
- ❑ Follow the injection of TREMCO® AQUA-FIL with a good flush of water through the ports. TREMCO® AQUA-FIL uses water to react and cure.
- ❑ A hand operated grease gun OR a standard airless paint pump can be used for the injection of the grout and water.
- ❑ Typical pressure injection into cracks is 1.4-20 MPa, depending on the width and depth of the crack. For large cracks and joints, oakum rope or similar open celled structure device can be used to soak in TREMCO® AQUA-FIL and then placed into the crack or joint.
- ❑ Once the TREMCO® AQUA-FIL has cured, the packers can be removed or cut-off, flush with the surrounding surface. The grout that has cured outside of the face of the crack can be cut-back with a margin trowel or similar scraping tool.
- ❑ The packer holes can be filled with hydraulic cement and finished as desired.

### CLEAN UP

- ❑ Use all appropriate protective equipment
- ❑ Avoid contact with the active grout
- ❑ Use TREMCO® PUMP RINSE to clean out the lines of the injection equipment. TREMCO® PUMP RINSE can then be left in the lines as a prime, prior to the next project
- ❑ Be sure to expel all TREMCO® PUMP RINSE from the lines prior to the next grouting job, for it will dramatically affect the curing capability of the grout.

### LIMITATIONS

- ❑ Colder temperatures will affect the viscosity and setting times of the product
- ❑ Avoid exceeding 32°C when warming product
- ❑ Water used to react TREMCO® AQUA-FIL must in the pH range of 3 – 10 for optimal performance
- ❑ Store material in moisture free packaging.
- ❑ Atmosphere moisture may get to product causing a foam "head" inside of pail. This can be peeled off and the material below can still be usable

### SHELF LIFE

1 year in original, unopened package

### STORAGE

Dry storage

### HEALTH & SAFETY PRECAUTIONS

The Material Safety Data Sheet (MSDS) must be read and understood prior to use.

### TECHNICAL SERVICE

TREMCO has a team of qualified Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information or service and advice, call Customer Service on (02) 9638 2755 or fax (02) 9638 2955.

### GUARANTEE/WARRANTY

TREMCO products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with TREMCO written instructions and (b) in any application recommended by TREMCO, but which is proved to be defective, will be replaced free of charge. Any information provided by TREMCO in this document relation to TREMCO's goods or their use is given in good faith and is believed by TREMCO to be appropriate and reliable. However, the information is provided as a guide only, as the actual use and application will vary with application conditions which are beyond our control. TREMCO makes no representation, guarantee or warranty relating to the accuracy or reliability of the information and assumes no obligation or liability in connection with the information. To the extent permitted by law, all warranties, expressed or implied are excluded