

TREMCO AQUA-DAM C

HYDROPHOBIC POLYURETHANE GROUTING SYSTEM

TECHNICAL INFORMATION

KEY BENEFITS SUMMARY

- ANSI/NSF 61 Certified
- Fast reaction time with added accelerator
- Very little shrinkage
- Excellent elongation to handle moving cracks and joints
- Tenacious bond to wet and dry substrates
- Needs very little water to react and cure
- Remains active when the water subsides

PRODUCT INFORMATION

DESCRIPTION

A hydrophobic polyurethane compound that is injected in concrete and other sound substrates to stop water from entering into occupied or unwanted places. The reaction time of the AQUA-DAM C is controlled through the use of its accelerator, known as AQUA-DAM ACCELERATOR. AQUA-DAM forms a water tight seal within the substrate, with very little shrinkage after curing.

USAGE/PURPOSE

- Leaking cracks and joints
- Water treatment facilities
- Wastewater treatment facilities
- Mines & tunnels
- Needs little water to react and cure
- Remains active when the water subsides

PACK SIZE

20Kg

PRODUCT CODE

Typical Properties – Liquid	Results	Test Method
Viscosity @ 25°C	500 cps	ASTM D1638
Specific Gravity	1.058	-
Physical State	Liquid	-
Colour	Amber	-
Typical Properties – Cured	Results	Test Method
Density	64 kg/m ³	ASTM D 1622
Elongation	40%	ASTM D 638
Tensile Strength	0.19 MPa	ASTM D 638
Shear Strength	0.11 MPa	ASTM C 273
Water Absorption	<1% by volume	ASTM D 2842

Typical Reaction Profile

Accelerator Percentage	0%	1.25%	2.5%
Initial Foam	Not Recommended	50 seconds	15 seconds
Reaction Time	Not Recommended	3 minutes and 20 seconds	1 minute and 5 seconds

USAGE GUIDELINES

SURFACE PREPARATION

- To ensure the project is completed properly, clean the exterior of the surfaces 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.



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SURFACE PREPARATION (CONTINUED)

- ❑ 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 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.
- ❑ 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.
- ❑ 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

- ❑ Prior to injecting AQUA-DAM C, 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 AQUA-DAM ACCELERATOR into the AQUA-DAM C and mix on slow speed for a minute or two, to ensure the accelerator is fully mixed in. The mixing ratios are as follows:

AQUA-DAM C		AQUA ACCELERATOR	
Package Size	Standard Amount	Minimum	Maximum
19L Pail	0.47 L Pail	0.24 L Pail	0.94 L Pail
208L Drum	4.75 L Pail	2.4 L Pail	9.5 L Pail

The standard mixing ratio should be used in most instances. Do not go below the minimum mixing amount, for the material will struggle to react, especially in colder weather. Do not add more than the maximum amount of accelerator for the material will face a great risk of shrinking, thus allowing water to pass through the crack or joint again.

PLACEMENT

- ❑ Once the injection packers have been set and the drilled holes and crack and flushed out with water, the injection of the material can begin.
- ❑ Start at the lowest point of the vertical crack and work upwards.
- ❑ Pump AQUA-DAM C into the packer until foaming material comes out the face of the crack and starts to approach the next packer.

PLACEMENT (CONTINUED)

- ❑ On the 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. A standard airless paint pump can be used for this application.
- ❑ Typical injection pressure into cracks is 1.4 – 20 MPa, depending on the width and depth of the crack. For large cracks and joints, oakum rope or a similar open celled structure device can be used to soak in AQUA-DAM C and then placed into the crack or joint.
- ❑ Once the AQUA-DAM C 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 scrapping tool.

CLEAN UP

Use all appropriate protective equipment. Avoid contact with the active grout. Use AQUA PUMP RINSE can be left in the lines as a primer, prior to the next project. Be sure to expel all AQUA PUMP RINSE from the lines prior to the next grouting job, for it will drastically affect the curing capability of the grout.

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 in 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.