

TECHNICAL DATA SHEET

Description:

Polywater® InstaGrout™ Sealant creates a barrier to protect transformer pads, J boxes, control cabinets, and switchgear base openings. Polywater® InstaGrout™ keeps out moisture and stops rodents, snakes, spiders and insects such as wasps and fire ants from burrowing up through earthen gaps into the pad enclosure, potentially causing costly outages or safety hazards to crews. The strong, lightweight seal withstands freeze-thaw cycles and environmental extremes. It is compatible with cable jacket materials and will not corrode metal.

InstaGrout™ Sealant is packaged in pre-measured kits for easy, on-site mixing. It flows around cables, conduits and other complex geometry. InstaGrout™ Sealant adheres to metals, plastics, wood and concrete, creating a permanent, but re-entenable barrier.

Self Leveling Application:

InstaGrout™ Sealant is easy to install because it flows into the target area before expanding.



InstaGrout™ is mixed and poured

InstaGrout™ fills in irregularities of the surface on which it is applied and finds its way between the maze of conduits and cables that complicate the application of grouts and other systems.



It flows and expands after 20 minutes

InstaGrout™ is engineered with a time delay that allows this flow before it expands and reacts into its final, durable form. It will naturally flow into small spaces and does not require troweling.



InstaGrout™ Sealant is used to fill a transformer cabinet base in place of concrete.

Product Benefits:

- Keeps out rodents, snakes and insects
- Creates a strong, resilient, lightweight seal
- Self levels and flows before expanding.
- Easy to mix and apply; *no water required*
- Tolerates environmental extremes
- Sturdy, cross-linked structure will not crumble or cave-in like concrete grout
- Compatible with cable jacket materials

End Use:

InstaGrout™ Sealant creates a strong base that can:

- Be used for minor repairs or large areas
- Fill and block openings and channels
- Level transformer bases

Component Properties:

Polywater® InstaGrout™ Sealant is a two-part, reactive system. It is a slightly gelled liquid for use with manual mixing.

<u>Property</u>	<u>Part A (Resin)</u>	<u>Part B (Curing Agent)</u>
Color	Brown	Gray
Form	Viscous Liquid 300 cps	Viscous Liquid 1,100 cps
Specific Gravity	1.24	1.07
VOC Content:	0 g/L	0 g/L

Cured Properties:

Polywater® InstaGrout™ Sealant cures to form a solid, closed cell matrix.

<u>Property</u>	<u>Typical Result</u>
Appearance	Light gray with small, even cells
Closed Cell Content	98%
Density	8 lbs/cu. ft.
Compressive Strength (ASTM D1691)	615 psi
Seal Strength Water	1 foot continuous,
Seal Strength Air	1 psi
Dielectric Value (ASTM D149)	61 V/mil

Material Compatibility

Polywater® InstaGrout™ Sealant is compatible with cable jacket materials. The foam is an inert solid that will not attack the jacket material.

Chemical Resistance

Polywater® InstaGrout™ Sealant is chemically resistant to gasoline, oils, dilute acids and bases, and most unsaturated hydrocarbons.

Adhesion:

Polywater® InstaGrout™ Sealant has good adhesion to a variety of materials found in control cabinets.

InstaGrout™ Sealant is cured around a one-inch bar at a depth of 1.5 inches. Force required to remove bar is measured. Adhesion is calculated based on seal surface area.

<u>Material</u>	<u>Adhesion</u>	<u>Value</u>
PVC	Excellent	100 lbs/ sq. in
Copper	Excellent	90 lbs/ sq. in
Aluminum	Excellent	95 lbs/ sq. in
HDPE	Good	25 lbs/ sq. in

Water Resistance:

Polywater® InstaGrout™ Sealant does not absorb water. To test water blocking performance, InstaGrout™ is installed into a PVC conduit, forming a 3-inch plug. Water is added to the system, and then pressurized to create a “water-head”.

<u>Condition</u>	<u>Result</u>
PVC Conduit	Holds 10 psi, 7 days (22.5 feet water)

InstaGrout™ Sealant will keep water out if it is properly installed with good seal at all the edges.

Environmental Resistance:

Polywater® InstaGrout™ Sealant withstands the rigors of the environment.

Temperature Use Range

-20°F to 200°F (-29°C to 93°C) Continuous
-40°F to 250°F (-40°C to 121°C) Peak

Polywater® InstaGrout™ Sealant withstands direct sunlight with no decrease in functionality. Surfaces exposed to UV will discolor and yellow. The cured product retains its hardness and continues to act as a barrier. Discoloration will not harm the performance of the material.

InstaGrout™ Sealant may also be protected with a weather proofing paint or coating. Acrylic, urethane and epoxy based products have excellent adhesion to the foam.

Application:

Field-Ready Kits

Polywater® InstaGrout™ Sealant is a two-part system packaged in pre-measured quantities for easy, on-site mixing.

Application Temperature

Working temperature for Polywater® InstaGrout™ Sealant is 35°F to 110°F (4°C to 43°C).

Usage Quantity

Carefully measure the area to be sealed by multiplying the width by the length of the opening pad in the structure. Do not subtract any conduits or other stub-up utilities. Use this measurement to estimate the minimum quantity required. Round up to determine quantity of InstaGrout™ Sealant required. It is best to use field measurements rather than measurements from plans or specs to calculate your job quantity. The openings to be filled in the field may not have the same dimensions as the drawing.

Example: Pull box measuring 15 inches (1.25 feet) by 36 inches (3 feet).

- Pull box area is 3.75 square feet.
- Seal requires one PMT-3 Kit and one PMT-1 Kit to cover 4 square feet at 3 inches. The additional PMT-1 will fill any holes or gaps left after the application of the PMT-3 Kit.

<u>Kit Size</u>	<u>Area Coverage (3-inch depth)</u>	<u>Volume Coverage</u>
PMT-1	1 square foot	0.25 ft ³
PMT-3	3 square feet	0.75 ft ³
PMT-10	10 square feet	2.5 ft ³

Area Preparation and Application

Prepare target area by filling holes and leveling the surface. Cover pea-gravel with one inch sand or dirt. Mix two parts well for at least 30 seconds until the product is a uniform gray color. Slowly pour onto target surface.

For full installation information, please see the InstaGrout™ Installation Instructions. (www.polywater.com/PMTinstructions.pdf)

Re-entering:

Additional conduits or cables may be passed through InstaGrout™ Sealant with relative ease. Cured InstaGrout™ Sealant may be drilled with auger bits or hole saws designed for wood. The overall integrity of the seal allows such drilling without collapsing the seal, which may be seen with grout. Simply drill through the InstaGrout™, and pass through the conduit or cable. Once the new conduit or cable is in place, an additional application of InstaGrout™ can reseal the area against future intrusion.

Cure Rate:

Application Temperature

Polywater® InstaGrout™ Sealant will set up and cure more quickly in warm temperatures.

<u>Temperature</u>	<u>Seal Formation</u>	<u>Full Cure</u>
35°F	1 hour	12 hours
70°F	20 minutes	4 hours
110°F	8 minutes	2 hours

Safety:

Polywater® InstaGrout™ Sealant is a two-part urethane containing highly reactive chemicals. Polyurethanes are common in the construction industry and have been used for many years. Some individuals may become sensitized to components in the unreacted resin. Precautions must be observed during use and handling of these materials.

The use of Polywater® InstaGrout™ Sealant in the prepackaged containers controls and reduces exposure. Use of protective gloves and eyewear is recommended. Once reacted, the foam is a solid, closed-cell polyurethane. The finished product may be considered non-toxic. See MSDS for more information.

Clean-up

Any unreacted material may be cleaned from surfaces with Polywater's Grime-Away™ Multipurpose Cleaner. Reacted material must be removed mechanically by scraping or sanding.

Storage and Handling:

Keep containers cool, dry and away from sunlight. Leave cartridges in the protective foil pouch until ready to use/reuse.

Product shelf life is one year.

Order Information:

Cat #	Package Description
PMT-1 (covers one ft ² at 3-inch depth)	1 Bottle Part A 1 Bottle Part B 1 Pair Gloves Instruction Sheet
PMT-3 (covers three ft ² at 3-inch depth)	1 Bottle Part A 1 Bottle Part B 1 Pair Gloves 1 Mixing Pail 1 Mixing Stick Instruction Sheet
PMT-10 (covers ten ft ² at 3-inch depth)	1 Jug Part A 1 Jug Part B 2 HTC-1 (Grime-Away™ Wipes) 1 Pair Gloves 1 Mixing Pail Instruction Sheet <i>(recommend using a drill paint mixer to mix)</i>

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Important Notice: The statements here are made in good faith based on tests and observations we believe to be reliable. However, the completeness and accuracy of the information is not guaranteed. Before using, the end-user should conduct whatever evaluations are necessary to determine that the product is suitable for the intended use.

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Makers of Polywater® and Dyna-Blue® Cable Lubricants
and Pull-Planner™ Software

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