TECHNICAL DATA SHEET
POLYWATER® INSTAGROUT™ SEALANT BARRIER

DESCRIPTION

Polywater® InstaGrout™ seals pad-mounted equipment openings to prevent outages and service disruptions due to entry of rodents, water, and humidity. This resilient, impermeable ground barrier improves electrical reliability. InstaGrout is ideal for equipment replacement where pad opening dimensions and/or pad positions have changed.

Once InstaGrout is mixed and poured into pad openings, its self-leveling expansion fills voids around conduit stub-ups and cable to create a smooth yet strong barrier. InstaGrout adheres to fiberglass, polymer concrete, and concrete pads. The strong, lightweight seal withstands freeze-thaw cycles and environmental extremes. InstaGrout exhibits excellent fire resistance. It will not settle, crack, shrink, or crumble.

SELF-LEVELING APPLICATION

InstaGrout is easy to install. It flows into the target area and expands into voids.

InstaGrout is mixed and poured

InstaGrout is engineered with a time delay that allows the material to flow throughout the target area. As the surface is covered, it expands and cross-links into its final, durable form. It will naturally flow into small spaces without need for troweling.

InstaGrout flows and expands after 20 minutes

InstaGrout repairs and creates a barrier for cabinet bases.

PRODUCT FEATURES

- **Deterrent** – Keeps mice, rats, snakes, insects, and water from entering the pedestal or cabinet.
- **Easy to Use** – Ready to mix and apply. No water needed.
- **Sturdy** – Strong, cross-linked seal is a lightweight alternative to concrete grout.
- **Blocks** – Flows and self-levels before expansion to seal the entire opening.
- **Re-Enterable** – Saw or drill after installation to install new ducts or cables.
- **Protects** – Cured product is fire resistant and offers permanent protection through weather extremes.

END USE

InstaGrout repairs small or large areas and can be used to level transformer bases. Use it with:

- Transformer pads
- J boxes
- Control cabinets
- Switchgear base openings

COMPONENT PROPERTIES

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

PROPERTY	PART A (RESIN)	PART B (CURING AGENT)
Color	Brown	Clear
Form	Viscous liquid 300 cps	Viscous liquid 550 cps
Specific gravity	1.24	1.11
VOC content	0 g/L	0 g/L

CURED PROPERTIES

InstaGrout cures to form a solid, closed-cell matrix.

PROPERTY	TYPICAL RESULT
Appearance	Cream yellow with small, even cells
Closed-cell content	98%
Density	8 lbs/ft^3 (128 kg/m^3)
Compressive strength (ASTM D1691)	130 psi (0.90 N/mm^2)
Tensile strength (ASTM D1623)	140 psi (0.97 N/mm^2)
Flexural strength (ASTM D790)	245 psi (1.69 N/mm^2)
Burning Characteristic (ASTM D4986)	Rated HBF, Fire resistant
Seal strength, water	15 ft (4.6 m) water head, continuous
Seal strength, air	2.5 psi (0.017 N/mm^2)
Dielectric value (ASTM D149)	61 V/mil

MATERIAL COMPATIBILITY

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

CHEMICAL RESISTANCE

InstaGrout is resistant to gasoline, oils, dilute acids and bases, and most unsaturated hydrocarbons.

ADHESION

InstaGrout has good adhesion to a variety of materials found in control cabinets.

InstaGrout is cured around a one-inch bar at a depth of 1.5 inches (3.8 cm). Force required to remove the bar is measured. Adhesion is calculated based on seal surface area.

MATERIAL	ADHESION	VALUE
PVC	Excellent	100 psi (0.69 N/mm^2)
Copper	Excellent	90 psi (0.62 N/mm^2)
Aluminum	Excellent	95 psi (0.66 N/mm^2)
HDPE	Good	25 psi (0.17 N/mm^2)

WATER RESISTANCE

InstaGrout does not absorb water. To determine water resistance, InstaGrout was tested to ASTM D2942. A large block of the cured material was submersed in water for 96 hours. Quantity water absorbed as a percentage of the block volume was calculated.

WATER ABSORPTION
1.24%

InstaGrout is water resistant and does not absorb water. This keeps moisture out of the system to limit the effect of corrosion.

ENVIRONMENTAL RESISTANCE

InstaGrout withstands the rigors of the environment.

Temperature Use Range
-20°F to 200°F (-30°C to 95°C) Continuous
-40°F to 250°F (-40°C to 120°C) Peak

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

APPLICATION

Field-Ready Kits

InstaGrout is a two-part system packaged in pre-measured quantities for easy on-site mixing.

Application Temperature

Working temperature for InstaGrout 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 required. It is best to use field measurements rather than measurements from plans or specs to calculate a 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 (or two PMT-2 kits) 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.*

KIT SIZE	COVERAGE (3-IN, 7.5-CM DEPTH)	VOLUME COVERAGE
PMT-1	1 ft^2, 0.1 m^2	0.25 ft^3, 0.007 m^3
PMT-3	3 ft^2, 0.3 m^2	0.75 ft^3, 0.02 m^3
PMT-10	10 ft^2, 0.9 m^2	2.5 ft^3, 0.07 m^3

Area Preparation and Application

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

For full installation information, please see the InstaGrout Installation Instructions.

InstaGrout Instructions PMT-1, PMT-2
InstaGrout Instructions PMT-3
InstaGrout Instructions PMT-10

CURE RATE

Application Temperature

InstaGrout will set up and cure more quickly in warmer temperatures.

TEMPERATURE	SEAL FORMATION	FULL CURE
35°F (2°C)	1 hour	4 hours
70°F (20°C)	20 minutes	1 hour
110°F (43°C)	8 minutes	30 minutes

REENTERING

Additional conduits or cables may be passed through InstaGrout with relative ease. Cured InstaGrout can 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 occur 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.

SAFETY

InstaGrout 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 InstaGrout 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 SDS for more information.

CLEAN-UP

Any unreacted material may be cleaned from surfaces using 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.

Product shelf life is 18 months.

MODEL SPECIFICATION

The statement below may be inserted into a customer specification to help maintain engineering standards and ensure work integrity.

The approved enclosure/electrical equipment pad opening sealant shall be Polywater InstaGrout Sealant Barrier. The base sealant shall flow and self-level to create a strong cross-linked polymer matrix barrier to seal out water, gases, and rodents. The base sealant shall be a closed-cell foam structure with compression strength >70 psi (480 kPa) (ASTM D1621) and dielectric strength >60 V/mil (2360 V/mm) (ASTM D149). Base sealant shall block 1-foot (0.03 bar) water head pressure continuously.

Base sealant shall be compatible with cable jacket materials. Base sealant shall be chemically resistant to gasoline, oils, dilute acids and bases, and most unsaturated hydrocarbons. Base sealant shall withstand direct sunlight with no decrease in functionality. Base sealant shall have excellent adhesion to plastics, PVC, HDPE, metals, copper, aluminum, wood, fiberglass, polymer concrete, and concrete. Base sealant shall withstand freeze/thaw cycles without loss of adhesion. Base sealant shall be rated “HBF” for fire resistance (ASTM D4986). Base sealant shall not propagate cracks or crumble when cut or drilled to allow service change-outs.

ORDER INFORMATION

CAT #	PACKAGE DESCRIPTION
PMT-1 (2 units/case)	1 - 750-mL burst pack 1 - pair of gloves 1 - instruction sheet Coverage is 1 ft^2 (0.1 m^2)
PMT-2 (2 units/case)	1 - 1500-mL burst pack 1 - pair of gloves 1 - instruction sheet Coverage is 2 ft^2 (0.1 m^2)
PMT-3 (1 unit/case)	1 - bottle part A 1 - bottle part B 1 - pair of gloves 1 - mixing pail 1 - mixing stick 1 - instruction sheet Coverage is 3 ft^2 (0.3 m^2)
PMT-10 (1 unit/case)	1 - jug part A 1 - jug part B 1 - pair of gloves 1 - mixing pail 1 - instruction sheet *(drill paint mixer recommended for mixing)* Coverage is 10 ft^2 (0.9 m^2)

CONTACT US

+1-651-430-2270 Main | +31 10 233 0578 Europe & Africa | +971 4 5521709 APAC & GCC | email: support@polywater.com

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