

Polywater PowerPatch® EP

PowerPatch repairs oil and gas leaks in power transformers, gas insulated switchgear, PILC cable, and other electrical assets. Use Polywater Putty to temporarily stop active leaks, then use PowerPatch sealant for a permanent repair. PowerPatch adheres to plastic, metals, fiberglass, and ceramic. PowerPatch is UV and weather resistant.

INSTALLATION

Installation temperature:

40°F to 120°F (4°C to 50°C)

In-service temperature:

-40°F to 250°F (-40°C to 120°C)

- Good surface preparation is critical.
- Mix entire cups together.
- Stop any active leaks with putty first.

SAFETY

- Wear eye protection.
- · Use protective gloves.



Sand or brush repair area

Surface Preparation

 Clean surface with rag or Polywater Grime-Away[™] Multipurpose Cleaner Wipes to remove dirt and grime.

Abrade the area to be sealed with a steel brush or sandpaper to remove loose particles and oxides, and to roughen the surface. Clean and abrade approximately 3 inches (7.5 cm) around the leak. If surface material is lead, follow prescribed work methods to avoid exposure to lead dust.

Wear nitrile gloves and safety glasses. Refer to SDS of all products before handling.

With an active leak, apply Putty to temporarily plug fluid. If there are no leaks, go to step 4



Clean area with cleaning wipe before applying sealant

2. Cut off a portion of the Polywater Putty Stick (approximately ½ inch (1 cm)), remove plastic wrap, and knead/mix by hand approximately 2 minutes until material is well mixed and of uniform color. For a pinhole leak, shape Putty into a plug the size of a large pea. For a leaking crack or seam, roll the Putty into a rope about ¼ inch (6 mm) thick.

Scrub leak area with cleaning wipe to thoroughly remove contaminants and oils from the surface, and to displace any remaining water. Make sure the surface is dry.



Apply Putty

3. Apply the mixed Polywater Putty Stick plug or rope over the leak, spreading it out about ½ inch (1 cm) from all points of the leak area with a thickness of approximately ½ inch (3 mm). The Putty will feel warm as it reacts. Apply constant pressure to this Putty patch with the palm of the hand for 2–3 minutes until material feels firm. For the best long-term seal, limit quantity of Putty.

Note: Prepare as many repairs as possible. This will reduce PowerPatch Sealant waste.

Permanent Seal Application



Mix 2-part paste sealant to a uniform grey color

4. Open one Part A cup (black paste) and one Part B cup (white paste). Remove the protective seal from the Part B cup and discard. A small amount of yellow skin or crust may form on contact with air. This will not harm the performance of the material. Discard any excess hard pieces.

Empty all the contents of the Part B cup into the larger, Part A cup. Mix for 30–60 seconds until the mixture is a uniform grey color. For larger repairs, two sets of Part A and B cups may be necessary.



Apply PowerPatch over Putty patch or leak area

5. Immediately apply the sealant to the prepared surface. If a temporary Putty patch has been made, start at the edge of the putty and cover with sealant. Spread the sealant to the surrounding area ½ to 1 inch (13 to 25 mm) beyond the leak or patch on all sides. Build a layer ¼ to $^{3}/_{8}$ inch (6 to 9 mm) thick over the repair area.

Finish Seal



Smooth edges of PowerPatch

6. Smooth the PowerPatch edges.

Application of the PowerPatch should take about 2–3 minutes. The sealant has a working time of approximately 6 minutes and a functional cure time of approximately 60 minutes, depending on ambient temperature. Do not move area of repair until functional cure is achieved. See Table 1.

TABLE 1

TEMPERATURE	WORKING TIME	FUNCTIONAL CURE
35°F 2°C	40 Minutes	7 Hours
52°F 11°C	20 Minutes	3½ Hours
70°F 21°C	10 Minutes	60 Minutes
88°F 31°C	5 Minutes	40 Minutes
106°F 41°C	2.5 Minutes	20 Minutes

ADDITIONAL INSTRUCTION TIPS

COLD WEATHER

PowerPatch should be kept as warm as possible. Store materials in a warm vehicle and use chemical warming pads to increase the temperature of the repair area. PowerPatch should not be installed below 40°F (4°C).

WARM WEATHER

In hot weather above 90°F (32°C), two coats may be needed on vertical applications. PowerPatch should not be installed above 120°F (50°C).

STORAGE AND HANDLING

Single use kit. Use entire cups of Part A and Part B.

Keep containers cool, dry, and away from sunlight. Keep containers tightly closed.

Product shelf life is: 24 months Part A, 15 months Part B.

CONTACT US

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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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