

INSTRUCTIONS FOR USE

POLYWATER® POWERPATCH® SEALANT (EPCT)



Polywater PowerPatch® EPCT

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 300°F (-40°C to 150°C)

- Good surface preparation is critical.
- Prime cartridge.
- Cartridge is reusable if stored properly.
- Stop any active leaks with putty first.

SAFETY

- Wear eye protection.
- Use protective gloves.

Surface Preparation



Sand or brush repair area

1. 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 $\frac{1}{2}$ inch (1 cm) from all points of the leak area with a thickness of approximately $\frac{1}{8}$ 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 sealant waste.

Permanent Seal Application



Setting Dispensing Speed

4. Place the PowerPatch cartridge into Power Caulking tool. Adjust dispensing speed to half. Higher speeds may cause the tool to auto shut off.

Twist cap counterclockwise to remove from cartridge.



Prime cartridge

5. Depress handle on dispensing tool to prime cartridge each time product is used until both the white and black resins are coming out of the cartridge.



Attach nozzle

6. Place static mixer onto cartridge and twisting clockwise to tighten. Depress handle on dispensing tool until PowerPatch comes out of mixing tip. Pump 1 or 2 more times to make sure you are getting an even mixture. Dispense and discard this excess material.

The PowerPatch should be a uniform gray color with no streaking when it comes out of the mixing tip.



Apply PowerPatch

7. Apply the sealant to the prepared surface. If a temporary Putty patch has been made, start at the edge to cover with sealant. Spread the sealant to the surrounding area $\frac{1}{2}$ to 1 inch (1.3 to 2.5 cm) beyond the leak or patch on all sides. Build a layer $\frac{1}{4}$ to $\frac{3}{8}$ inch (6 to 9 mm) thick over the repair area.

Finish seal



Smooth edges

8. Smooth the PowerPatch and the edges. Make sure to leave a layer of $\frac{1}{4}$ to $\frac{3}{8}$ inch (6 to 9 mm) thick.

Application of the PowerPatch should be done in segments of about 2–3 minutes. Then smooth material and start again. 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

APPROXIMATE TIMES

TEMPERATURE	WORKING TIME	FUNCTIONAL CURE
40°F 2°C	24 Minutes	7 Hours
52°F 11°C	12 Minutes	3½ Hours
70°F 21°C	6 Minutes	60 Minutes
88°F 31°C	3 Minutes	40 Minutes
106°F 41°C	1.5 Minutes	20 Minutes

ADDITIONAL INSTRUCTION TIPS

COLD WEATHER

PowerPatch should be kept as warm as possible. Cold adhesive is difficult to pump, will take longer to cure, and may stress the application tool. Store materials in a warm vehicle and use chemical warming pads to increase the temperature of the repair area. At temperatures below 60°F (15°C), do not use static mixer. Dispense two parts onto a hard surface and hand mix. PowerPatch should not be installed below 40°F (4°C).

To create a mobile warming storage container place cartridges in a cooler and add body warming packets.

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

Static mixer can be used for 2 minutes after last application. Beyond 2 minutes and for long-term storage, leave static mixer on cartridge and allow sealant to harden. Use a new static mixer for each later use. Product shelf life is 18 months.

CONTACT US

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

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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