

Installation Operation & Maintenance Instructions for the PuroPak-P

Step 1: Demineralize The Supply Water

The Puropal-1 cartridge filters lime and aggressive dissolved substances such as sulfates, nitrates and chlorides out of the local domestic water. This method does not release any chemical additives into the water. The PuroPal-1 operates on the basis of a mixed bed ion exchange resin that demineralizes the water. In doing so, the water is demineralized, which meets fill water specifications of glycol and boiler manufacturers. Treated water through the PuroPal-1 is not intended for use as drinking water.

The capacity of the PuroPal-1 is determined based on the conductivity (salt and mineral) content of the incoming water supply (see Figure 2). Higher conductivity content in the site water supply results in a lower yield of treated water. The PuroPal-1 resin is designed to change colour from blue to beige once the resin has expired and will no longer provide demineralization of the incoming water. When the resin has a complete colour phase from inlet to outlet the cartridge has expired and can be disposed of with the household waste.



The cartridge may only be under pressure during the duration of the fill-up and must be constantly monitored while in use. The maximum temporary pressure is 100 psi (6.8 bar) at 140 °F (60 °C).



Demineralize system fill water prior to blending fluid with glycol and/or inhibitor (see Figure 3)



The resin from the cartridge must not enter the heating system. Before each use, check the retention sieves on both sides of the cartridge. The cartridge must always be monitored while in use.

Directions:

- 1) Connect the PuroPal-1 via Female Garden Hose Connection to site water supply.
- 2) Connect garden hose to outlet of PuroPal-1 (Female Garden Hose) and run hose to mixing tank/reservoir (see Figure 3)
- 3) Confirm hose(s) are secure prior to opening site water supply
- 4) Fill mixing tank/reservoir to the appropriate volume based on glycol and/or inhibitor dilution proportion
- 5) Disconnect PuroPal-1 from site water supply after system has been filled.

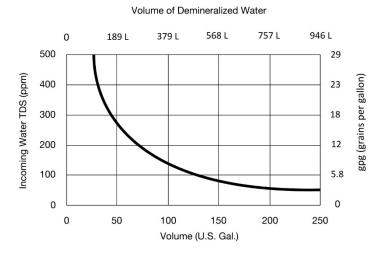


Figure 1: PuroPal-1 capacity based on incoming water TDS (Total Dissolved Solids) or GPG (Grains Per Gallon)

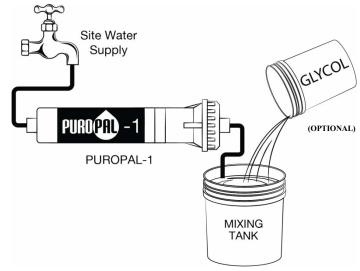


Figure 2: Mix demineralized fill water with glycol and/or Protect 1 Inhibitor prior to filling system



Step 2: Add Protect 1 And Fill the System

Directions:

Add 1 bottle (500 ml or 16.9 oz.) of AXI-THERM PROTECT 1 for every 100 litres (25 gallons) of water (Dosage: 0.5%). Lower concentrations do not yield satisfactory results. Higher concentrations have no adverse effects.

Use an AXI-THERM INJET or mechanical fill pump to add the product to the system. Complete the label provided and affix it to the system at a visible location.

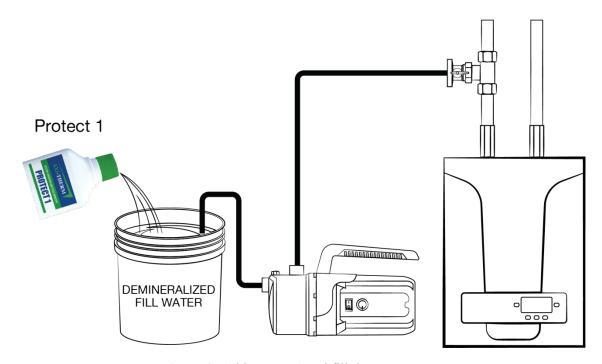


Figure 3: Add Protect 1 and fill the system

Maintenance:

Test system fluid inhibitor strength annually using the AXI-THERM "P1-TEST" kit. Add additional PROTECT 1 as required.

Protect 1 and Clean 5 Environmental And Safety Information:

Do not use in potable water systems. Do not ingest. Do not dispose of waste through the environment. Keep out of reach of children. The product is not classified according to the Globally Harmonized System (GHS).