



THE ENERGY CONSERVATORY

TEC FOG PUFFER™



OVERVIEW

Kit Components

The TEC Fog Puffer™ includes

1. Two (2) batteries
2. Two (2) cartridges
3. Two (2) end pieces
4. USB charger for batteries
5. Modified turkey baster
6. Check valve
7. Rubber stopper
8. Propylene Glycol (PG)
9. Small bottle for filling cartridges



Instructions for Use

1. Charge the battery

- Thread battery (1) into USB charger (4) and connect to a powered USB port.
- Batteries typically take around 2 hours to fully charge.
- The LED light on the charger will turn green when the battery is fully charged.
- The LED light on the end of the battery will glow blue when active and will pulse to indicate a low charge.



2. Fill cartridge with Propylene Glycol (PG)

- Fill small bottle (9) with the supplied PG (8) or your own fluid mix.
- Unscrew end piece (3) from cartridge body (2).
- Fill the transparent reservoir of cartridge body (2) with PG using the dropper tip of the small bottle (9).
- Gently push the end piece (3) back onto the cartridge body (2) and thread until sealed.



3. Assemble into Baster

- Thread filled and sealed cartridge (2) onto battery (1).
- Slide rubber stopper (7) over battery and position to cover the joint between the battery and cartridge.
- Insert stopper into baster (5) as shown in the kit components image on the previous page.

Battery to
Cartridge Joint



Correct Stopper
Position

Other Instructions and Notes from Gary

Propylene Glycol (PG) is used in cosmetics, as a food additive and in theatrical foggers and e-cigarettes. For foggers (and vaping liquids called 'juice') it's often mixed with vegetable glycerin (VG) among other liquids. We haven't experimented with different mixtures yet as we think the less viscous PG wicks into the ceramic heater faster, has a good density, and seems to work well. We are interested if you find a mix which you prefer.

You'll probably notice that if you do several puffs in a short period of time the fog will begin to thin. It may take a moment for the ceramic heater element to get resaturated with fluid and after a few minutes the smoke gets thicker again.

The most likely long-term failure mode will be the pressure switch inside the battery, which will fail after being saturated with fluid over extended use. This will occur either from fluid leaking out the cartridge and into the battery or from the small amount of residual mist inside the heater area at the end of a puff and which gets drawn into the battery. The check valve in the baster body is intended to minimize this, and we will have replacement batteries and cartridges for sale. When batteries have failed during our development and test process, the LED of the battery either stops coming on at all or turns on for about 10 seconds when not in use.

We hope while using this fogger you take note of what we could change to make it better.

We look forward to your feedback.



Gary Nelson



For more information and a video overview scan the QR code to visit the TEC Fog Puffer™ product page or visit our website.



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