

Operating Instructions for Wick-tape Alcohol Lamp

Warning: Read the following instructions thoroughly before using the lamp. Operate only under adult supervision. Never leave the burner unattended while it is lit. Use this device only in a well-ventilated place where a fire extinguisher is accessible.

Introduction

The wick-type alcohol lamp has a glass body with aluminum cap and aluminum snuffer cover. The hexagonal shape is designed to help reduce the risk of fuel spillage and fire if the lamp is knocked over while in use.

Assemble your lamp by removing the wick from the glass body (a bent paperclip will do this easily) and inserting it through the hole in the cap. The wick should protrude about 3/8" from the top of the metal cap. Spread out the wick fibers similar to the photo.



The snuffer cover is designed to extinguish the flame. It is not tight fitting and will not keep alcohol from evaporating if stored in the lamp between uses. Remove fuel from the lamp and store it in the original fuel container between uses of more than a few hours.

For best results, we recommend you use denatured or ethyl alcohol (also called ethyl alcohol, ethanol or ethyl hydrate) with an alcohol content of 90% or higher. You can also use isopropyl (rubbing) alcohol with an alcohol content of 90% or higher.

Safety Precautions

Caution: A hazard exists whenever you are working around an open flame.

- Operate only under adult supervision.
- Operate only in a well-ventilated area.
- Keep an operable fire extinguisher accessible when using an open flame.
- Do not open fuel containers or fill lamp around an open flame.
- Tightly cap fuel container and move to a safe storage location before lighting.
- Keep all combustible materials (clothing, paper, books, chemicals, etc.) away from the lamp when in use.
- Keep long hair tied back when working near an open flame.

Operation

1. Find a safe, well-ventilated area to operate the lamp and conduct your experiment. Remove combustible materials from the work area.

Warning: Alcohol lamps produce small amounts of carbon monoxide and other toxic combustion by-products. Use only in a well-ventilated area.

2. Inspect the lamp before each use to make sure there are no cracks, chips or defects in the glass body. Do not use a cracked or defective lamp as it cause fire or injury. Call 800-860-6272 for a replacement.
3. Adjust the fiber wick so it protrudes about 3/8" from the top of the metal cap.
4. Fill the lamp with a suitable fuel: denatured or ethyl alcohol (also called ethyl alcohol, ethanol or ethyl hydrate) with an alcohol content of 90% or higher. You can also use isopropyl (rubbing) alcohol with an alcohol content of 90% or higher.

Warning: Do not use any fuel other than denatured ethyl alcohol or isopropyl rubbing alcohol. Using other fuels with this burner could result in serious injury. Denatured ethyl and isopropyl alcohol can cause serious injury if misused. Read and follow the safety instructions on the alcohol container.

5. Tightly cap fuel container and move to a safe storage location. Clean up any fuel spills before lighting the lamp.
6. Use the lamp only in an upright position.
7. Light the lamp. In a few minutes the flame should be burning steadily and cleanly.
8. If the flame keeps going out or the wick is burning up, the wick is too tight in the metal cap. Put out the flame, and then remove the wick. Pull some of the fibers out of the wick and then insert the wick back into the metal cap. (This should only be necessary if replacement wicks are tight fitting.)
9. After use, extinguish the lamp with the snuffer cover. Keep the snuffer cover on when not in use. This cover is designed to snuff the flame only and is not tight fitting. Remove fuel from the lamp and store it in the original fuel container between uses of more than a few hours.

Caution: The burner, cap and snuffer cover can get hot during use and can cause burns. Do not touch any part of the burner with your hands until the burner fully cools.

Denatured ethyl alcohol, sold separately, is readily available in the paint section at most hardware stores. It can also be purchased in 30ml bottles from Home Science Tools. The item number is UN-ETHYALC.