

LIGHTWEIGHT STOVES

See the Scout Handbook for reasons to use a lightweight stove.

There are 3 types of lightweight stove: liquid fuel (rubbing alcohol, white gas or kerosene); liquid gas fuel (propane or butane), gel fuel (Stern), and; solid fuel.

Advantages:

Liquid fuel is least expensive and produces a lot of cooking time per refill. The flame is widely adjustable.

Gas fuel also produces a lot of heat per refill and has widely adjustable flame.

Gel fuel is safe to store and to transport.

Solid fuel is the safest to store and to transport.

Disadvantages:

Liquid fuel can spill or leak, damaging other things in a pack and creating a serious hazard of accidental combustion. If the spilled fuel catches fire, the fire can run downhill into and over things, and it can float on water while burning.

Gas fuel is often more expensive, and the container can rupture and explode if damaged or exposed to high temperatures.

The flame of gel fuel is not as widely adjustable.

The flame of solid fuel is not adjustable at all. More heat requires adding more tablets. The fuel is quickly used up.

Safety:

Always have a water bucket ready, as with any fire, before lighting the stove. Be sure that the pot is sturdily supported on top of the stove. Some mess kit pots may have too small a diameter to rest securely on top of the stove. Remember that the stove will stay hot for several minutes after the flame has gone out.

Operation: Open the stove so that the ends are solidly at right angles to the base with the serrated edges up. One fuel tablet will just barely bring one quart of water to boil. Place the tablet on end on the base and orient the stove so that an end, not a side, is facing into the wind. You may also need to place a rock or other fire-proof object next to the windward end of the stove to protect the flame from the wind. Fill the pot with the appropriate amount of water and set it securely on top of the stove. **MAKE SURE THAT IT IS SECURE AND THAT THE STOVE IS NOT ON A SLOPE OR WOBBLING.** Strike a match and light the fuel. Wait for the water to heat or for the fuel to burn out, whichever comes first. If the water is not hot enough when the fuel burns out, wait until the fuel is fully out. Then put another tablet in place and light it. If the water is hot enough and there is still a good amount of fuel left, blow it out and, after it is cool, wrap it in foil to be used next time.

When the cooking is done **and the stove had cooled**, wipe off the base and close it up.