## The ISO-Clean 1.1 Stove: Instructions for Use



## Introduction

The ISO-Clean 1.1 stove was designed to be used with both the Bobcat (pots) and Snow Leopard (mugs) cooking systems. We consider the ISO-Clean stove to be a "fair weather "stove as isopropyl alcohol can be difficult to light at cool temperatures (<40 F). The stove holds enough fuel to bring 2 to 3 cups of water to a boil (91%). We have used the stove up to 5000 feet with no problems, above, 9000 feet, the burn rate dropped off significantly. The stove is designed to burn 91% isopropyl alcohol without generating soot! Isopropyl alcohol is the easiest type of alcohol to obtain as it can be found at most grocery and convenience stores. Higher percentages of isopropyl alcohol (such as HEET in the red bottle) can be used as long as water is added to reduce the total percentage of alcohol. When using the Snow Leopard system, we recommend that you use 70% isopropyl alcohol as that system runs hotter than the Bobcat System. To guarantee soot free operations, follow the instructions below.

- 1. Place the stove on the center of the heat shield
- 2. Add 70% isopropyl alcohol. To boil 2 cups water, add about <sup>3</sup>/<sub>4</sub> of an oz. of fuel (as a guide, the bottom of the large inlet holes are just a little over 1 fluid ounce).
- 3. We find it easiest to light the stove using butane lighters and igniting the stove through one of the larger inlet holes near the base. In cold weather, it may be easier to dip a small twig into the fuel, light the twig and then lower the flame into the center of the stove. We include a carbon felt disk that can be added to the stove to assist you in lighting the stove in cold weather. Using the disk will increase your fuel usage.
- 4. Once you light the stove, you can place your pot/mug on top, however; if the stove is too "cold" you may get a little soot on the bottom of your pot. The stove will be "warm" when the flame is fully formed: this may take 5-10 seconds at room temperature. In cold conditions (<35 F) the warm up time may be 60 seconds.
- 5. When the pot is placed on the windscreen/pot stand, it will control the airflow and the flame will change from yellow to blue.
- 6. Let the stove cool down to room temperature prior to handling.
- 7. After use, there may be residual liquid in the stove. This is a water/alcohol mixture and can be emptied onto the heat shield to evaporate. Dry the stove before storage.

## **Warnings and Safety**

- Only use stove outside in an area clear of flammable material. Do NOT use the stove in enclosed spaces (tent or cabin).
- Use the stove under adult supervision.
- This is a 70% isopropyl alcohol stove; no other fuels can be used!
- The flame is difficult to see, use caution when removing the pot or checking the flame.
- In operation, all components of cooking system are hot and should not be touched.
- Alcohol stoves are one of the safest forms of heating food, however; all stove carry some risk. Proper operation is the key to safe operation.

## The FLAT CAT ISO-Clean 1.1 Stove





QR code on how to light your Iso-Clean Stove http://youtu.be/yi687Kw-FOA