

# Fuel Consumption Using a Backpacking Stove

## Equipment Used

Backpacking Stove    Snow Peak Giga Stove auto ignition Stainless Model GS-100A  
Cooking Pot            Evernew Titanium 0.9L model ECA252  
Fuel                      Snow Peak Giga Power GP-110 (Isobutane/Propane) Net weight  
                                 110 gram, 3.88 oz

## Procedure

Outside Temperature 90F  
Water temperature 82F  
Altitude 1,000 feet  
No wind

Boil one cup of water in the cooking pot. One cup of water is usually what is required for a single dehydrated meal. Thus this is the amount to be boiled. I did not use a windscreen. Also I did not put the lid on the cooking pot. The top of the cooking pot was open.

Turns of gas valve on the backpacking stove	Time
1/2 turn of the stove valve	2 minutes
1 turn of the stove valve	1 minute 50 seconds

Total burn time 46 minutes (23 cups of water) for 110 gram fuel canister  
(Snow Peak Giga Power GP-110 Net weight 110 gram, 3.88 oz)

There are a lot of factors that effect the boiling time:

1. Outside air temperature
2. Water temperature
3. Amount of water to boil
4. If the outside of the cooking pot is wet or dry  
(I dried the outside of the pot each time)
5. Type of fuel
6. Altitude
7. What is under the stove (I used dry ceramic tiles)
8. If the cooking pot lid is on or off
9. Windy or calm