

## Emergency Storage Quantities for Fuel Related Items

By Joseph Parish

Just about everyone stores candles for emergencies however very few people really know how many to store up on. To judge the time it takes for a candle to melt you must consider its diameter as well as the length. A candle which is  $\frac{3}{4}$  of an inch in diameter and 4 inches long will burn for approximately 2 hours and 20 minutes, while one which is  $\frac{7}{8}$  of an inch but the same length will burn for 5 hours. The two-inch diameters will maintain a light for approximately 7 hours per inch.

It is important to remember that when storing your candles, they should be kept in a cool location. You should store up on at least three candles per day. I keep my candles in a small plastic tote box under my home.

If you happen to have a need for Canned Heat these tend to store easily and can safely be stored indoors. A small seven-ounce can will burn continuously for 1  $\frac{1}{2}$  hours. If these items are stored within a warm environment they will evaporate over a period of time. Therefore, once again you may consider placing these in a basement or under your home.

Everyone should have flashlights for quick and immediate light. A dual battery flashlight with two new batteries will operate continuously for up to 6 hours. These flashlights should also be stored within a cool location. I try to keep one operating flashlight in every room of the home within easy reach.

Four newspaper logs will burn for approximately one hour. They produce compatible heat as do the same quantity of the wooden logs. Occasionally you may find log rollers at local yard sales or order them from the internet.

Charcoal should be reserved for use in outdoor cooking only. You can store the charcoal in a moisture resistant container in order to keep it dry. I maintain it in several large trash cans with tight fitting tops. If you use the charcoal inside of a foil oven you would use one briquette to obtain a 40 degree increase in temperature. If using them in a Dutch oven to cook, use the size of the oven measured in inches and add three additional briquettes on the top plus the oven size measured in inches and minus three briquettes placed upon the bottom. This will provide approximately 350 to 375 degrees of heat.

Now we come to kerosene. If you have a kerosene lantern with a 1-inch wick it will burn for approximately 45 hours on one quart. Therefore, if you burn it 5 hours per day you can expect to use the following quantities of fuel.

Quarts per day would be  $\frac{1}{9}$

Quarts per month would be  $3 \frac{1}{2}$

Quarts per year would be 10 gallons

For cost kerosene is currently the least expensive of the liquid fuels. It will store for a long period of time and can safely be used indoors provided you have good ventilation. In order to avoid the usual kerosene, smell you should start as well as extinguish your lanterns outside. If you can obtain several 55-gallon drums you can store your kerosene for several years if not longer.

I do not use white gas however I have included the information here for those who may wish to use it. In order to burn a two-mantle lantern for five hours per day on white gasoline the following quantities of fuel will be consumed:

Per day would be  $5/12$  quarts

Per month would be  $3 \frac{1}{4}$  gallons

Per year would be 38 gallons

If you happen to be using a dual burner stove for 4 hours daily the following quantities of fuel will be consumed:

Per day would be 1 quart

Per month would be  $7 \frac{3}{4}$  gallons

Per year would be 91 gallons

Note that white gas is the costlier of the fuels and must be used in the outdoors only.

Lastly, we come to propane. Propane is a very portable fuel. It may safely be used indoors if you provide good ventilation and if your equipment is created for indoor use. Keep in mind that the propane grills or the camp stoves should be operated only outdoors. Propane bottles should only be stored outdoors with ventilation. Butane is another gas which can be employed indoors if you provide good ventilation.

I would like to end this article with the thought that you should never store a liquid fuel in your home and above all keep them out of reach of your children.