

Fuel Storage

NEVER EVER STORE FUELS IN YOUR GARAGES OR DWELLING!

ALWAYS STORE FUELS IN AN OUT-BUILDING!

ALWAYS STORE FUELS IN APPROVED CONTAINERS!

GET OUT OF THE HABIT OF STORING MOWERS AND GAS IN THE GARAGE!

DON'T LET YOUR PREPAREDNESS BE THE CAUSE OF YOUR DISASTER!

Fuel storage is a subjective term. If you have a wood burning fireplace, store firewood. If your power-out cooking options are propane powered stoves and ovens, store more propane. If your power-out heating options include kerosene, store more kerosene. If gasoline is your primary fuel for your generator store gasoline. Stabilize and rotate fuels (STA-BIL® fuel stabilizer for gasoline. and STA-BIL® for diesel). We recommend "clear gas" rather than gasoline with ethanol. Ethanol "varnishes" carburetors and other components, destroying small engines. **Legally Store All Fuels!** Your local Fire Marshal or fire authority can answer any of your questions.

STA-BIL Storage Fuel Stabilizer

It eliminates the need to drain the fuel tank before storage and keeps fuel fresh for up to 24 months. Fuel left in the tank of a stored vehicle or container can begin to break down in as little as 30-60 days. This can cause gum, varnish, rust and corrosion to build up in the fuel lines and engine.



Store oil, 2 cycle oil, Sta-Bil, DEF, filters, lubricants such as grease, gear oil, antifreeze, washer fluid, spare spark plugs for gas powered equipment, replacement parts such as chains for chain saws and other fluids & parts for critical equipment.

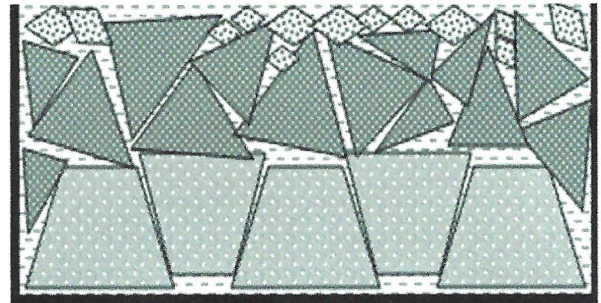


Firewood

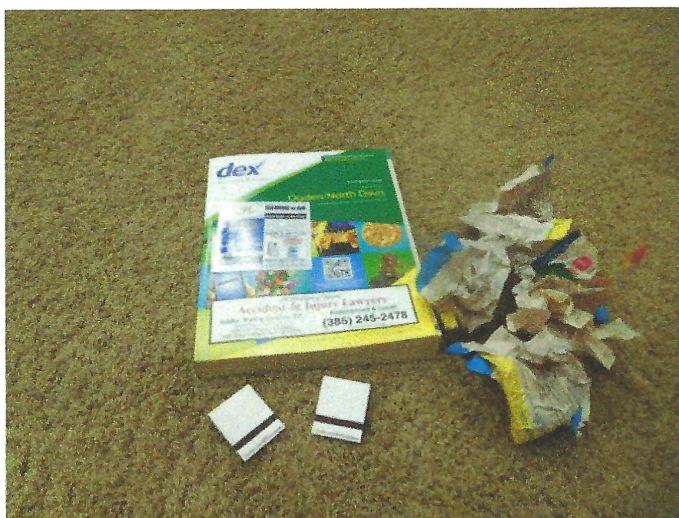
TYPE OF WOOD	LOG	DESCRIPTION OF WOOD
Oak		- Very dense - Hot-burning - Should season at least one year
Maple		- Difficult to split - Efficient, hot-burning - Should season at least one year
Cherry		- Burns at medium heat - Sweet burning aroma - Sparks a lot, doesn't produce lots of smoke
Birch		- Burns very quickly - Bright, hot-burning - Good firestarter
Pine		- High sap content - Burns messy - Don't use as your exclusive firewood
Elm		- Very dense, hard wood - Difficult to split - Doesn't smell great as it burns
Chestnut		- Burns and splits easily - Burns at a low heat - Sparks a lot, heavy smoke



Using Banana Boxes for Neatly Storing Firewood Loading Configuration



Old Telephone Books make Excellent "Tinder Tablets"
A great addition to your Vehicle Kit.



Propane

Propane stores indefinitely, and it is easy to store. It has 3 carbon atoms and 8 hydrogen atoms, making it heavier than natural gas. This is why it more readily sinks to the floor near ignition points. This is just another reason why 20 pound propane tanks should be left outside. Even when using "indoor safe" heaters like the "Lil Buddy" and the Big Buddy" always use an operable carbon monoxide / smoke detector.

- Produces more energy per cubic foot (approximately 2,500 BTUs) than natural gas. It requires significantly more air for complete combustion, about 24 cubic feet of air per cubic foot of gas. It is a by-product of the refinery process.
- Stored as a liquid under pressure in tanks that are delivered and refilled. This makes it ideal for mobile or remote applications, like on a food truck or in a rural area without a pipeline.
- Becomes a gas when the pressure is released and can be stored in portable tanks, making it a versatile fuel for a wide range of applications. The piping for propane is typically a smaller diameter because less of it is needed to generate the same amount of heat as natural gas.
- There are ways to conveniently refill 1 pound (green) propane tanks. You can do it for your own personal use but it is illegal to transport, sell etc.. Another, safer means to refill, is the "Fuel Keg"® by Mr. Heater. This system works flawlessly, and I recommend it above refilling pre-filled 1 pound tanks. Pre-filled 1 pound tanks are disposable, and the Schrader valves tend to leak after a couple of refills. Tanks and start-up kits can be pricey, but it's worth it in the long run!



Kerosene

Kerosene is an indoor safe, clean burning, fuel for kerosene heaters and oil lamps. There can be a very low odor associated with burning kerosene. Low Odor Alternative Kerosene Fuels are available as are additives to make it smell pine fresh. Always use an operable carbon monoxide / smoke detector when using. The downside to kerosene is the cost, about \$15 for 1.25 gallons.

Do not use Jet fuel! Jet fuel was originally kerosene, but as the jet engine has evolved other toxic chemicals have been added, chemicals that prevent micro-organisms from taking up residence in fuel tanks and freezing at altitude. Before these chemicals were introduced to jet fuel, as a refueler, we would add a can of "Prist" to each wing tank.



Gasoline & Diesel

We recommend always filling up your vehicle when you hit the half-a-tank mark. Filling up in the early morning or late at night when temperatures are cooler will net you a little more fuel, additionally fill your vehicle on the slowest delivery speed. The slower the deliver speed slows the vaporization process and again you net a little more fuel. That said, if your garage is heated, a "topped-off" tank of fuel will expand and pour out of the filler neck / gas cap, creating a dangerous, explosive situation.

When storing fuel always stabilize the fuel with STA-BIL®. STA-BIL has two different formulas, one for gasoline and the other for diesel. If you're storing diesel, store plenty of DEF as well. Storing diesel has been somewhat overlooked. After an emergency event, and power is out, gas pumps don't pump, it is diesel that powers the heavy equipment necessary for major clean-up.



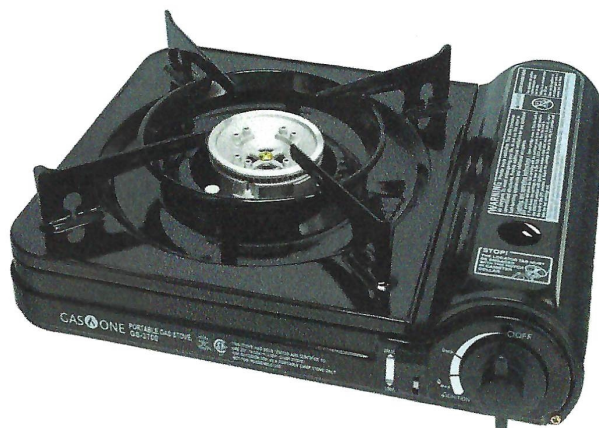
Dosage Amount

Gallons	Ounces
1	Half an ounce (1 Tablespoon)
2.5	1 oz.
5	2 oz.
10	4 oz.
15	6 oz.
20	8 oz.
25	10 oz.
40	16 oz.
80	32 oz.
160	64 oz.
320	128 oz. (1 Gallon)
640	2 Gallons



Butane

Butane is a highly flammable hydrocarbon gas used as a portable fuel source for lighters and camping stoves, as an aerosol propellant, and as a component in gasoline and other chemical products. It is also a main component of Liquefied Petroleum Gas (LPG). Butane is easily liquefied under pressure, which makes it convenient for storage and transport in canisters. It is used as a propellant in aerosol cans for products like hairspray and deodorant. It is a colorless gas at standard temperature and pressure, but can be easily liquefied when pressurized. It is odorless in its pure form but often has an odor added to it to detect leaks.



Iso-Butane

Like butane, Both have the same chemical formula but differ in their structural arrangement: n-butane has a straight chain of four carbon atoms, while isobutane has a central carbon atom bonded to three other carbon atoms, forming a branched structure. While it is considered relatively safe and low in toxicity, it is a flammable gas and can cause frostbite on contact or asphyxiation at high concentrations. This formula in camping stoves burns better at higher elevations making it the choice of extreme outdoor enthusiasts.



Canned Heat

Canned Heat by Ready Hour® is a six-hour source of heat that can be used indoors. It contains diethylene glycol which makes it burn hotter than standard gelatinous alcohol based canned heat. It can be used in a variety of Ready Hour® products such as their foldable camp stove, Vesta heater with their non-electric fan (or you can remove the fan component and use it as a stove), and their Ember Oven which can use either the canned heat or bio-mass (sticks, twigs, etc.).



Charcoal



