

Even army manuals on field expedient explosives are almost useless because they are just outlines written with the understanding that an instructor is going to fill in the blanks. It is a fun game to search out the materials that can be put together to make something go "boom". You can find what you need in grocery stores, hardware stores, and farm supplies. An interesting point to remember is that it is much easier to make a big explosion than a small one. It is very difficult for a home experimenter to make a firecracker, but a bomb capable of blowing the walls out of a building is easy.

#### HOW TO MAKE ROCKET FUEL

This is easy to make and fun to play with. Mix equal parts by volume Potassium or Sodium Nitrate and granulated sugar. Pour a big spoonful of this into a pile. Stick a piece of blackmatch fuse into it; light; and step back. This is also a very hot incendiary. A little imagination will suggest a lot of experiments for this.

#### ANOTHER ROCKET FUEL

Mix equal parts by volume of zinc dust and sulfur. Watch out if you experiment with this. It goes off in a sudden flash. It is not a powerful explosive, but is violent stuff even when not confined because of its fast burning rate.

As I continue from this point some of the ingredients are going to be harder to get without going through a chemical supply. I try to avoid this. I happen to know that B. Prieser Scientific (local to my area) has been instructed by the police to send them the names of anyone buying chemicals in certain combinations. For example, if a person were to buy Sulfuric acid, Nitric acid and Toluene (the makings for TNT) in one order the police would be notified. I will do the best I can to tell you how to make the things you need from commonly available materials, but I don't want to leave out something really good because you might have to scrounge for an ingredient. I am guessing you would prefer it that way.

#### HOW TO MAKE AN EXPLOSIVE FROM COMMON MATCHES

Pinch the head near the bottom with a pair of wire cutters to break it up; then use the edges of the cutters to scrape off the loose material. It gets easy with practice. You can do this while watching TV and collect enough for a bomb without dying of boredom.

Once you have a good batch of it, you can load it into a pipe instead of black powder. Be careful not to get any in the threads, and wipe off any that gets on the end of the pipe. Never try to use this stuff for rocket fuel. A science teacher was killed that way.

Just for fun while I'm on the subject of matches, did you know that you can strike a safety match on a window pane? Hold a paper match between your thumb and first finger. With your second finger, press the head firmly against a large window. Very quickly, rub the match down the pane about 2 feet while maintaining the pressure. The friction will generate enough heat to light the match.

Another fun trick is the match rocket. Tightly wrap the top half of a paper match with foil. Set it in the top of a pop bottle at a 45 degree angle. Hold a lighted match under the head until it ignites. If you got it right, the match will zip up and hit the ceiling.

I just remembered the match guns I used to make when I was a kid. These are made from a bicycle spoke. At one end of the spoke is a piece that screws off. Take it off and screw it on backwards. You now have a piece of stiff wire with a small hollow tube on one end. Pack the material from a couple of wooden safety matches into the tube. Force the stem of a match into the hole. It should fit very tightly. Hold a lighted match under the tube until it gets hot enough to ignite the powder. It goes off with a bang.

#### HOW TO MAKE CONCENTRATED SULFURIC ACID FROM BATTERY ACID

Go to an auto supply store and ask for "a small battery acid". This should only cost a few dollars. What you will get is about a gallon of dilute sulfuric acid. Put a pint of this into a heat resistant glass container. The glass pitchers used for making coffee are perfect. Do not use a metal container.

Use an extension cord to set up a hotplate out doors. Boil the acid until white fumes appear. As soon as you see the white fumes, turn off the hot plate and let the acid cool. Pour the now concentrated acid into a glass container. The container must have a glass stopper or plastic cap -- no metal. It must be air tight. Otherwise, the acid will quickly absorb moisture from the air and become diluted. Want to know how to make a time bomb that doesn't tick and has no wires or batteries? Hold on to your acid and follow me into the next installment.

#### HOW TO MAKE A CHEMICAL TIME DELAY FUSE:

To get an understanding of how this is going to work, mix up equal parts by volume Potassium chlorate and granulated sugar. Pour a spoonful of the mixture in a small pile and make a depression in the top with the end of a spoon. Using a medicine dropper, place one drop of concentrated sulfuric acid in the depression and step back.

It will snap and crackle a few times and then burst into vigorous flames. To make the fuse, cut about 2 inches off a plastic drinking straw. Tamp a small piece of cotton in one end. On top of this put about an inch of the chlorate/sugar mixture.

Now lightly tamp in about a quarter inch of either glass wool or asbestos fibers. Secure this with the open end up and drop in 3 or 4 drops of sulfuric acid. After a few minutes the acid will soak through the fibers and ignite the mixture.

The time delay can be controlled by the amount of fiber used and by varying how tightly it is packed. Don't use cotton for this. The acid will react with cotton and become weakened in the process. By punching a hole in the side of the straw, a piece of blackmatch or other fuse can be inserted and used to set off the device of your choice.