

AVOID HANDLING BARE-HANDED, BREATHING DUST AND FUMES, AVOID ANY CHANCE OF INGESTION. AFTER UTENSILS ARE USED FOR THE MANUFACTURE OF THIS EXPLOSIVE RETIRE THEM FROM THE KITCHEN AS THE CHANCE OF POISONING IS NOT WORTH THE RISK. THIS EXPLOSIVE, IF MANUFACTURED AS ABOVE, SHOULD BE SAFE IN STORAGE BUT WITH ANY HOMEMADE EXPLOSIVE STORAGE IS NOT RECOMMENDED AND EXPLOSIVES SHOULD BE MADE UP AS NEEDED.

#### *Improvised Explosives Plastique Explosive from Bleach*

This explosive is a potassium chlorate explosive. This explosive and explosives of similar composition were used in World War II as the main explosive filler in grenades, land mines, and mortar used by French, German, and other forces involved in that conflict. These explosives are relatively safe to manufacture.

One should strive to make sure these explosives are free of sulfur, sulfides, and picric acid. The presence of these compounds result in mixtures that are or can become highly sensitive and possibly decompose explosively while in storage. The manufacture of this explosive from bleach is given as just an expedient method. This method of manufacturing potassium chlorate is not economical due to the amount of energy used to boil the solution and cause the 'dissociation' reaction to take place. This procedure does work and yields a relatively pure and a sulfur/sulfide free product. These explosives are very cap sensitive and require only a #3 cap for instigating detonation.

To manufacture potassium chlorate from bleach (5-6% sodium hypochlorite solution) obtain a heat source (hot plate etc.) a battery hydrometer, a large pyrex or enameled steel container (to weigh chemicals), and some potassium chloride (sold as salt substitute). Take one gallon of bleach, place it in the container and begin heating it. While this solution heats, weigh out 63 g potassium chloride and add this to the bleach being heated. Bring this solution to a boil and boiled until when checked by a hydrometer the reading is 1.3 (if a battery hydrometer is used it should read full charge).

When the reading is 1.3 take the solution and let it cool in the refrigerator until it's between room temperature and 0°C. Filter out the crystals that have formed and save them. Boil the solution again until it reads 1.3 on the hydrometer and again cool the solution. Filter out the crystals that have formed and save them. Boil this solution again and cool as before.

Filter and save the crystals. Take these crystals that have been saved and mix them with distilled water in the following proportions: 56g per 100 mL distilled water. Heat this solution until it boils and allow it to cool. Filter the solution and save the crystals that form upon cooling. The process of purification is called fractional crystallization. These crystals should be relatively pure potassium chlorate.

Powder these to the consistency of face powder (400 mesh) and heat gently to drive off all moisture. Melt five parts vaseline and five parts wax. Dissolve this in white gasoline (camp stove gasoline) and pour this liquid on 90 parts potassium chlorate (the crystals from the above operation) in a plastic bowl. Knead this liquid into the potassium chlorate until immediately mixed. Allow all the gasoline to evaporate. Place this explosive in a cool, dry place. Avoid friction, sulfur, sulfide, and phosphorous compounds.

This explosive is best molded to the desired shape and density (1.3g/cc) and dipped in wax to water proof. These block type charges guarantee the highest detonation velocity. This explosive is really not suited to use in shaped charge applications due to its relatively low detonation velocity. It is comparable to 40% ammonia dynamite and can be considered the same for the sake of charge computation.

If the potassium chlorate is bought and not made it is put into the manufacture process in the powdering stages preceding the addition of the wax/vaseline mixture. This explosive is brisant and powerful. The addition of 2-3% aluminum powder increases its blast effect. Detonation velocity is 3300 m/sec.

#### *Plastique Explosives From Swimming Pool Chlorinating Compound*

This explosive is a chlorate explosive from bleach. This method of production of potassium or sodium chlorate is easier and yields a more pure product than does the plastique explosive from bleach process.

In this reaction the HTH (calcium hypochlorite  $\text{CaClO}_2$ ) is mixed with water and heated with either sodium chloride (table salt, rock salt) or potassium chloride (salt substitute). The latter of these salts is the salt of choice due to the easy crystallization of the potassium chlorate.

This mixture will need to be boiled to ensure complete reaction of the ingredients. Obtain some HTH swimming pool chlorination compound or equivalent (usually 65% calcium hypochlorite). As with the bleach process mentioned earlier the reaction described below is also a dissociation reaction. In a large pyrex glass or enameled steel container place 1200g HTH and 220g potassium chloride or 159g sodium chloride. Add enough boiling water to dissolve the powder and boil this solution. A chalky substance (calcium chloride) will be formed. When the formation of this chalky substance is no longer formed the solution is filtered while boiling hot. If potassium chloride was used potassium chlorate will be formed.

This potassium chlorate will drop out or crystallize as the clear liquid left after filtering cools. These crystals are filtered out when the solution reaches room temperature. If the sodium chloride salt was used this clear filtrate (clear liquid after filtration) will need to have all water evaporated. This will leave crystals which should be saved.

These crystals should be heated in a slightly warm oven in a pyrex dish to drive off all traces of water (40-75°C). These crystals are ground to a very fine powder (400 mesh).