

## I. COMMON "WEAK" EXPLOSIVES

### A) Gunpowder:

75% Potassium Nitrate  
15% Charcoal  
10% Sulfur

The chemicals should be ground into a fine powder (separately!) with a mortar and pestle. If gunpowder is ignited in the open, it burns fiercely, but if in a closed space it builds up pressure from the released gases and can explode the container. Gunpowder works like this: The potassium nitrate oxidizes the charcoal and sulfur, which then burns fiercely. Carbon dioxide and sulfur dioxide are the gases released.

### B) Ammonal:

Ammonal is a mixture of ammonium nitrate (a strong oxidizer) with aluminum powder (the 'fuel' in this case). I am not sure of the percentage of composition for ammonal, so you may want to experiment a little using small amounts.

### C) Chemically Ignited Explosives:

#### Experiment 1:

A mixture of 1 part potassium chlorate to 3 parts table sugar (sucrose) burns fiercely and brightly (similar to the burning of magnesium) when 1 drop of concentrated sulfuric acid is placed on it. What occurs is this: when the acid is added it reacts with the potassium chlorate to form chlorine dioxide, which explodes on formation, burning the sugar as well.

#### Experiment 2:

Using various chemicals, I have developed a mixture that works very well for imitating volcanic eruptions. I have given it the name 'MPG Volcanite'. Here it is: Potassium chlorate + potassium perchlorate + ammonium nitrate + ammonium dichromate + potassium nitrate + sugar + sulfur + iron filings + charcoal + zinc dust + some coloring agent. (Scarlet = strontium nitrate, Purple = Iodine crystals, Yellow = Sodium chloride, Crimson = Calcium chloride, etc).

#### Experiment 3:

So, do you think water puts out fires? In this one, it starts it! Mixture: Ammonium nitrate + ammonium chloride + iodine + zinc dust. When a drop or two of water is added, the ammonium nitrate forms nitric acid which reacts with the zinc to produce hydrogen and heat. The heat vaporizes the iodine (giving off purple smoke) and the ammonium chloride (becomes purple when mixed with iodine vapor). It also may

ignite the hydrogen and begin burning.

Ammonium nitrate: 8g  
Ammonium chloride: 1g  
Zinc dust: 8g  
Iodine crystals: 1g

Experiment 4:

Potassium permanganate + glycerine when mixed produces a purple-coloured flame in 30 seconds to 1 minute. Works best if the potassium permanganate is finely ground.

Experiment 5:

Calcium carbide + water releases acetylene gas (highly flammable gas used in blow torches).