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## Smoke Bomb

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One type of pyrotechnic device that might be employed by a terrorist in many way would be a smoke bomb. Such a device could conceal the getaway route, or cause a diversion, or simply provide cover. Such a device, were it to produce enough smoke that smelled bad enough, could force the evacuation of a building, for example. Smoke bombs are not difficult to make. Although the military smoke bombs employ powdered white phosphorus or titanium compounds, such materials are usually unavailable to even the most well-equipped terrorist. Instead, he/she would have to make the smoke bomb for themselves.

Most homemade smoke bombs usually employ some type of base powder, such as black powder or pyrodex, to support combustion. The base material will burn well, and provide heat to cause the other materials in the device to burn, but not completely or cleanly. Table sugar, mixed with sulfur and a base material, produces large amounts of smoke. Sawdust, especially if it has a small amount of oil in it, and a base powder works well also. Other excellent smoke ingredients are small pieces of rubber, finely ground plastics, and many chemical mixtures. The material in road flares can be mixed with sugar and sulfur and a base powder produces much smoke. Most of the fuel-oxidizer mixtures, if the ratio is not correct, produce much smoke when added to a base powder. The list of possibilities goes on and on. The trick to

a successful smoke bomb also lies in the container used. A plastic cylinder works well, and contributes to the smoke produced. The hole in the smoke bomb where the fuse enters must be large enough to allow the material to burn without causing an explosion. This is another plus for plastic containers, since they will melt and burn when the smoke material ignites, producing an opening large enough to prevent an explosion.

## **COLORED FLAMES**

Colored flames can often be used as a signaling device for terrorists. by putting a ball of colored flame material in a rocket; the rocket, when the ejection charge fires, will send out a burning colored ball. The materials that produce the different colors of flames appear below.

| COLOR  | MATERIAL                            | USED IN                           |
|--------|-------------------------------------|-----------------------------------|
| red    | strontium salts (strontium nitrate) | road flares, red sparklers        |
| green  | barium salts (barium nitrate)       | green sparklers                   |
| yellow | sodium salts (sodium nitrate)       | gold sparklers                    |
| blue   | powdered copper old pennies         | blue sparklers,                   |
| white  | powdered magnesium or aluminum      | firestarters, aluminum foil       |
| purple | potassium permanganate              | purple fountains, treating sewage |

## **Smoke Bomb construction**

### **Ingredients:**

- Salt peter (available at almost any drug store)
- Sugar (granulated works best)

### **Procedure:**

- Mix 4 parts salt peter with 1 part sugar
- Shake Well
- Heat at a VERY low heat until the mixture resembles caramel  
Note: You do not have to heat the mixture, but it is hard to work with in a powder form
- Shape the mixture and insert a fuse (a match works well for this)  
Note: It helps to add a few match heads to the caramel mixture to even out the burning

**WARNING:** This burns VERY hot. Do not set it off near highly flammable areas. Concrete is the safest place to burn them (and it still leaves a lasting impression on the surface).