

Improvised Low Explosives:

Low explosives are simple combinations of two or more ingredients, one of which will be an oxidizer and another a fuel. I have included a few low explosive mixtures here, chosen on the basis of ease of manufacture (none of these require anything more than mixing of the ingredients) and availability of ingredients.

Low Explosive Mixtures (measurements are by weight)

Chlorate Powder-

1 part potassium chlorate or sodium chlorate

1 part sugar

Flash Powder-

4 parts potassium Perchlorate

1 part aluminum powder

1 part sulfur

or

7 parts potassium Perchlorate

5 parts aluminum powder

Firecracker Powder-

6 parts potassium nitrate

3 parts aluminum powder

1 part sulfur

or

4 parts potassium nitrate

1 part aluminum powder

1 part sulfur

or

2 parts potassium chlorate

1 part aluminum powder

1 part sulfur

or

5 parts potassium nitrate

2 parts aluminum powder

3 parts sulfur

Permanganate Powder-

3 parts potassium permanganate

2 parts aluminum powder

Ammonpulver-

4 parts finely powdered ammonium nitrate

1 part charcoal

Potassium Nitrate Production:

Potassium nitrate (saltpeter) can usually be found on the civilian market. It is used as a fertilizer supplement, a diuretic and for stump removal. If you can't obtain any it can be extracted from nitrate bearing soil. The yield ranges from .1 to 10% by weight, depending on the fertility of the soil.

Sources:

Nitrate bearing earth or other soil containing old decayed materials, about 3-1/2 (13-1/2 liters) gallons vegetable or animal matter.

Manure piles which have been left to sit for several months.

Earth from old burial grounds.

Decayed stone or mortar buildings.

Foundations.

Caves.

Materials Required:

Fine wood ashes, about 1/2 cup totally burned whitish wood ash powder.

Bucket or similar container about 5 gallons (19 liters) in volume (plastic, metal, or wood)

2 pieces of finely woven cloth, each slightly larger than bottom of bucket

Shallow pan or dish, at least as large as bottom of bucket

Shallow heat resistant container (ceramic, metal, etc.)

Water - 1-1/3 gallons (6-3/4liters)

Alcohol about 1 gallon (4 liters) (rubbing alcohol, etc.)

Heat source (fire, electric heater, etc.)

Note: Only the ratios of the ingredients are important. Thus, for twice as much potassium nitrate, double quantities used.

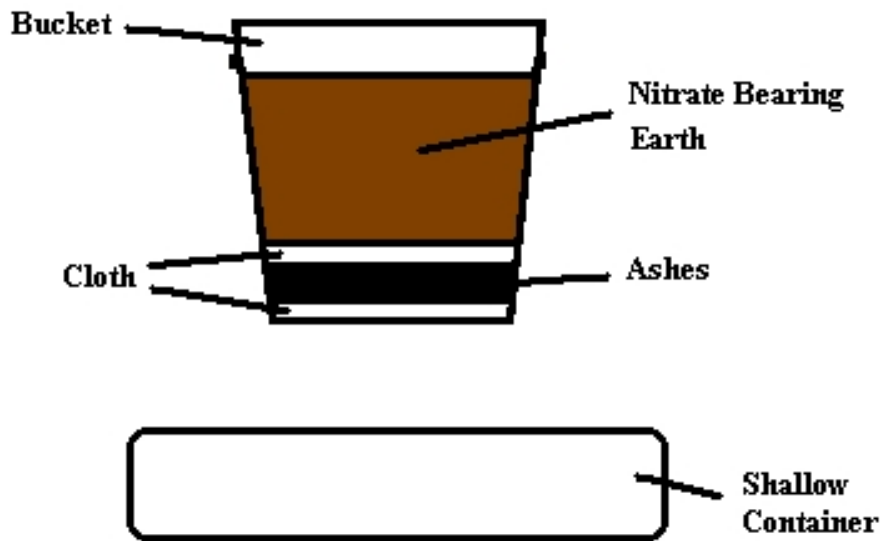
Procedure:

1. Punch holes in bottom of bucket. Spread one piece of cloth over holes inside of bucket.

2. Place wood ashes on cloth and spread to make a layer about the thickness of the cloth. Place second piece of cloth on top of ashes.

3. Place dirt in bucket.

4. Place bucket over shallow container..



Potassium Nitrate Production

5. Boil water and pour it over earth in bucket a little at a time. Allow water to run through holes in bucket into shallow container. Be sure water pours through all of the earth. Allow drained

liquid to cool and settle for 1 to 2 hours.

Note: Do not pour all water at once, since this may cause stoppage.

6. Carefully drain off liquid into heat resistant container. Discard any sludge remaining in bottom of the shallow container.

7. Boil mixture over hot fire for at least 2 hours. Small grains of salt will begin to appear in the solution. Scoop these out as they form, using a strainer.

8. When liquid has boiled down to approximately half its original volume, remove from fire and let sit. After half an hour add an equal volume of alcohol. When mixture is poured through paper, small white crystals will collect on top of it.

9. To purify the potassium nitrate, re-dissolve the dry crystals in the smallest possible amount of boiled water. Remove any salt crystals that appear (step 7); pour through an improvised filter made of several pieces of paper and evaporate or gently heat the concentrated solution to dryness.

10. Spread crystals on flat surface and allow to dry. The potassium nitrate crystals are now ready for use.

Improvised Black Powder-

Black Powder can be prepared in a simple, safe manner. It may be used as pipe-bomb filler or gun powder.

Materials Required:

Potassium nitrate, granulated, 3 cups (3/4 liter)

Wood charcoal, powdered, 2 cups (1/2 liter)

Sulfur, powdered, 1/2 cup (1/8 liter)

Alcohol, 5 pints (2-1/2 liters) (whiskey, rubbing alcohol, etc.)

Water, 3 cups (3/4 liter)

Heat source

2 Buckets - each 2 gallon (7-1/2 liters) capacity, at least one of which is heat resistant (metal, ceramic, etc.)

Flat window screening, at least 1 foot (30 cm) square

Large wooden stick

Cloth, at least 2 feet (60 cm) square

Note: The above amounts will yield two pounds (900 grams) of black powder. However, only the ratios of the amounts of ingredients are important. Thus, for twice as much black powder, double all quantities used.

Procedure:

1. Place alcohol in one of the buckets.
2. Place potassium nitrate, charcoal, and sulfur in the heat resistant bucket. Add 1 cup water and mix thoroughly with wooden stick until all ingredients are dissolved.
3. Add remaining water (2 cups) to mixture. Place bucket on heat source and stir until small bubbles begin to form.

Caution: Do not boil mixture. Be sure all mixture stays wet. If any is dry, as on sides of pan, it may ignite.

4. Remove bucket from heat and pour mixture into alcohol while stirring vigorously.

5. Let alcohol mixture stand about 5 minutes. Strain mixture through cloth to obtain black powder. Discard liquid. Wrap cloth around black powder and squeeze to remove all excess liquid.

6. Place screening over dry bucket. Place workable amount of damp powder on screen and granulate by rubbing solid through screen.

Note: If granulated particles appear to stick together and change shape, recombine entire batch of powder and repeat steps 5 and 6.

7. Spread granulated black powder on flat dry surface so that a layer about ½ inch (1-1/4 cm) is formed. Allow to dry. Use radiator, or direct sunlight. This should be dried as quickly as possible, preferably in one hour. The longer the drying period, the less effective the black powder.

Caution: Remove from heat as soon as granules are dry. Black powder is now ready for use.

"Red or White Powder" Propellant

"Red or White Powder" Propellant may be prepared in a simple, safe manner. The formulation describes below will result in approximately 2-1/2 pounds of powder. This is a small arms propellant and should only be used to reload ammunition for weapons with 1/2" or less bore diameter, but not pistols. This propellant also makes an excellent pipe-bomb filler.

Materials Required:

Heat source (Kitchen stove or open fire)

2 gallon metal bucket

Measuring cup (8 ounces)

Wooden spoon or rubber spatula

Metal sheet or aluminum foil (at least 18 in. sq.)

Flat window screen (at least 1 ft. sq.)

Potassium nitrate (granulated) 2-1/3 cups

White sugar (granulated) 2 cups

Powdered ferric oxide (rust) 1.8 cup (This can be obtained from steel filings + water)

Clear water, 3-1/2 cups

Procedure:

1. Place the sugar, potassium nitrate, and water in the bucket. Heat with a low flame, stirring occasionally until the sugar and potassium nitrate dissolve.

2. If available, add the ferric oxide (rust) to the solution. Increase the flame under the mixture until it boils gently.

NOTE: The mixture will retain the rust coloration.

3. Stir and scrape the bucket sides occasionally until the mixture is reduced to one quarter of its original volume, then stir continuously.

4. As the water evaporates, the mixture will become thicker until it reaches the consistency of cooked breakfast cereal or homemade fudge. At this stage of thickness, remove the bucket from the heat source, and spread the mass on the metal sheet.
5. While the material cools, score it with the spoon or spatula in criss-crossed furrows about 1 inch apart.
6. Allow the material to air dry, preferably in the sun. As it dries, rescore it occasionally (about every 20 minutes) to allow air-drying.
7. When the material has dried to a point where it is moist and soft but not sticky to the touch, place a small spoonful on the screen. Rub the material back and forth against the screen mesh with spoon or other flat object until the material is granulated into small worm-like particles.
8. After granulation, return the material into direct sunlight to dry completely

Notes on commercially available low explosives:

Black Powder: This is the oldest known explosive and is still used today in muzzle-loading firearms. I have provided a recipe for this very simple compound, however commercial black powder is usually more powerful and more reliable than the homemade variety. Most gun stores stock commercial black powder. It comes in various grain sizes graded from largest to smallest as, Fg, FFg, FFFg, FFFFg, FFFFFg. Naturally FFFFg is the best choice as an explosive filler but any grade will do in a pinch. Pyrodex is a substitute for black powder which produces less fouling in firearms but is interchangeable with black powder

as an explosive filler. Black powder is sensitive to shock, spark and friction. It must be dried before use if it becomes wet.

Smokeless Powder: This is the propellant used in modern firearms. It is available commercially to those who reload their own cartridges and shells. Smokeless powder comes in two basic forms... single-base (SBSP), which is composed of nitrocellulose (guncotton) along with various stabilizers, and double-base (DBSP), which is of the same basic composition but also contains a small amount of nitroglycerin to increase its power. SBSP is used in most center-fire rifle cartridges and is less powerful than DBSP which is used in most pistol and shotgun ammunition. Smokeless powder is less sensitive to shock, spark and friction than black powder. It also must be dry to function.

Match Heads: Match heads are a very simple and universally available low-explosive filler. They require no mixing and can be obtained without any paper trail or suspicion. This type of filler is, however, less powerful than many of the other fillers mentioned and therefore must be tightly confined to produce a good blast. A box of 50 matchbooks usually sells for around a dollar or so at a convenience store but much less from a wholesale depot which services bars and restaurants. Be certain to only use paper matches and not the wooden, "strike-anywhere" type as these are extremely sensitive to friction and shock. Match heads should be cut off from their paper stems with a pair of sharp scissors. You will find that you must use up quite a few books of matches to produce enough filler for an average sized pipe bomb. Once cut, match heads can be stored safely for long periods in an airtight container. This type of filler

will not function when wet and is very difficult to dry out completely.