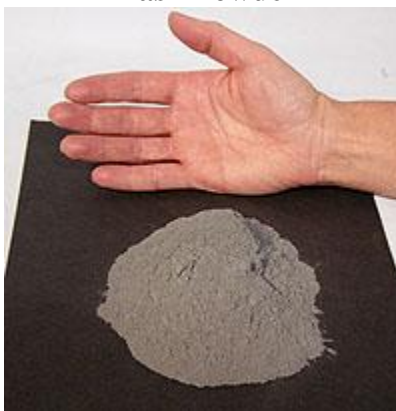


Flash Powder



Flash Powder is an explosive used in all firecrackers & larger salutes such as M-80s & Aerial Bombs.

Although there are many different formulas for Flash Powder, the safest, (and the industry standard) is made just from Potassium Perchlorate & German Aluminum. It is far superior to any other Flash Powder formula in many respects.

The Formula

70/30 Flash Powder

Potassium Perchlorate	70 %
Aluminum Powder "German Dark"	30 %

Both Potassium Perchlorate & Aluminum Powder can be purchased at Skylighter.com.

- ✦ [Aluminum Powder](#) (Indian Blackhead)
- ✦ [Potassium Perchlorate](#)

This is the industry standard Flash Powder mixture found in all Firecrackers & Salutes.

All firework formulas are measured **ONLY** byweight.

For more information on measuring & weighing, see our "[Basic Manipulations](#)" section.

Cautions

Flash Powders are high energy explosive mixtures and require the utmost caution in their manufacture.

Of the Flash Powder mixtures listed below, the **ONLY** one that should be used in Salutes (exploding fireworks) is 70/30 Flash Powder, made from Potassium Perchlorate & Aluminum Powder.

Older Flash Powder mixtures containing Potassium CHLORATE or SULFUR are **VERY** dangerous, **VERY** sensitive to friction and static electricity, and have exploded without warning.

The addition of Sulfur to Flash Powder formulations increases the possibility of spontaneous combustion by the formation of Sulfurous & Sulfuric acid, and the composition's sensitivity to friction & shock.

It does not increase the report sound.

Although this particular Flash Powder is not terribly sensitive, it will still explode with sufficient impact or friction.

Never grind, pound, or subject any Flash Powder to friction or shock.

Under the proper conditions, it may explode with devastating results.

Procedure



The 2 chemicals used to make Flash Powder. The one on the left is Potassium Perchlorate, a fine white powder. The other is German Aluminum Powder, a dust-like, dark gray powder that doesn't even really look like Aluminum. Although "Bright Aluminum" Powder can also be used in place of German Aluminum, it will only work well in large salutes with very heavy walls and thick end plugs. German Aluminum will make a much more powerful Flash Powder that will produce a great report, even in small salutes with thin wall tubes.



Begin by weighing out 70 grams of Potassium Perchlorate.



Next, you'll want to sift the Potassium Perchlorate through a very fine screen or strainer to break up any small lumps. There are many strainers available in kitchen supply shops and it's important to get the proper kind. The screen mesh (the size of the holes in the screen) should be much, much smaller than an ordinary window screen. You want a strainer with the finest mesh possible. You should not be able to move the individual wires that make up the screen if you try to with your fingers. Using a screen like this will defeat the purpose. Large clumps will simply move the wires and make the holes bigger allowing larger particles to go through. These type screens may cost around \$2.00 to \$5.00, but a good quality Stainless Steel screen with a very fine mesh (a mesh that won't slide around) will probably cost you closer to \$10.00 or \$12.00.

You can find these type of strainers at some supermarkets, and kitchen supply stores (try your local mall).



Weigh out 30 grams of German Aluminum powder. It will not be necessary to sift the Aluminum powder through a screen.

Mixing

There are many ways to safely mix Flash Powder, we're going to show you the two most popular. One involves shaking the two in a plastic baggie, the other involves placing the two chemicals on a sheet of paper and gently lifting opposite corners until the composition is well mixed. This second technique is normally used with more sensitive mixtures, but there are those who only feel comfortable mixing any explosive mixture this way. Personally, we use the plastic baggie technique.



Pour the 2 chemicals on a sheet of paper.



Pour the chemicals into a Zip-Loc plastic baggie, making sure not to get any powder on the bag seal. If you do, the bag will not seal properly.



Although this type of Flash Powder mixture isn't very sensitive to static charge, we just like to add this optional step for the hell of it. "Static Guard" is a spray that you can find in your local supermarket/grocery store in the laundry supply aisle. It works great at dissipating static charges on a variety of materials. We like to spray it on just about everything (even our clothing) for added protection.

On the other hand, we've fired 8" electrical discharges from a Van DeGraffelectrostatic generator, directly into piles of this type Flash Powder and never had an ignition. Why then, do we bother to use Static Guard? The only answer is: "why not?". It's always better to be safe, than sorry, and why not take a few extra precautions when working with high energy materials? There's always the possibility of some weird 1 in a million chance of an unusual occurrence, so why not take the extra second, spend the extra \$2.00 and buy some added safety insurance. So, with that said, spray some Static Guard on your Zip-Loc baggie.



Shake the bag well to blend the 2 chemicals together.

Pour the mixture out, onto a sheet of paper, and you've got a 100 gram batch of damn strong 70/30 Flash Powder.

Other Flash Powder Formulas

The following are special purpose Flash Powder formulas that find use in some magic tricks (when lit as a loose powder), but most do not perform well in salutes (exploding fireworks).

Potassium Nitrate Flash Powder

Potassium Nitrate	50 %
Magnesium Powder	50 %

Barium Nitrate Flash Powder

Barium Nitrate	68 %
German Aluminum Powder	23 %
Sulfur	9 %

Red Magnesium Flash Powder

Strontium Nitrate	50 %
Magnesium Powder	50 %

Green Magnesium Flash Powder

Barium Nitrate	50 %
Magnesium Powder	50 %
