

# Gerb Formulas

The following formulas are arranged alphabetically by the name of the formula and by the type of pyrotechnic. The following formulas have been modified from *Fireworks & Pyro Projects* published by Skylighter.com. We have simplified the chemical descriptions and formulas so that users can more easily produce a formula without having to procure some, otherwise, specialized physical forms of the required chemicals.

All the usual precautions must be followed when working with these formulas. One of the most important is to grind or pulverize each component separately and to never subject finished mixtures to friction or excessive pressure when packing the tubes. We recommend a PVC pipe with masking or duct tape over one end to gently press the mixture(s) into the gerb tubes. The taped end flexes when pressed down onto the mixture but still allows sufficient packing of the powders.

## Blue Gerb Formula:

For colored flames, without sparks, omit the titanium. Magnesium powder may be substituted for aluminum. Guanadium nitrate may be substituted for hexamine:

Ammonium Perchlorate	38.0%
Copper (II) (or Copper (I)) Oxide	16.0%
Titanium	13.0%
Chlorinated Latex Rubber	12.0%
Aluminum, fine mesh	10.0%
Hexamine	8.0%
Charcoal	3.0%
Total:	100.0%

## Blue Steel Gerb Formula:

For colored flames, without sparks, omit the titanium:

Ammonium Perchlorate	65.0%
Hexamethylenetetramine	10.0%
Stearic Acid	7.0%

Copper Carbonate	6.0%
Iron, Powder	12.0%
Total:	100.00%

**Gold Glitter Gerb Formula:**

For the magnalium one may consider 50:50 spherical aluminum powder and magnesium powder.

Potassium Nitrate	49.0%
Charcoal	12.0%
Sulfur	6.0%
Sodium Oxalate	8.0%
Antimony (III) Sulfide	15.0%
Magnalium, 200 mesh	10.0%
Total:	100.00%

**Green Gerb Formula:**

For colored flames, without sparks, omit the titanium:

Barium Nitrate	44.0%
Chlorinated Latex Rubber	17.0%
Magnesium	17.0%
Titanium	13.0%
Red Gum	9.0%
Total:	100.00%

**Lime Green Gerb Formula:**

For colored flames, without sparks, omit the titanium:

Barium Nitrate	43.0%
Sodium Nitrate	1.0%
Chlorinated Latex Rubber	17.0%
Magnesium	17.0%
Titanium	13.0%
Red Gum	9.0%
Total:	100.00%

### **Orange Gerb Formula:**

For colored flames, without sparks, omit the titanium:

Strontium Nitrate	29.0%
Sodium Nitrate	15.0%
Chlorinated Latex Rubber	17.0%
Magnesium	17.0%
Titanium	13.0%
Red Gum	9.0%
Total:	100.00%

### **Purple Gerb Formula:**

For colored flames, without sparks, omit the titanium:

Potassium Perchlorate	20.0%
Strontium Nitrate	20.0%
Chlorinated Latex Rubber	16.0%
Magnesium	16.0%
Titanium	12.0%
Copper (II) Oxide	8.0%
Red Gum	8.0%
Total:	100.00%

### **Red Gerb Formula:**

For colored flames, without sparks, omit the titanium:

Strontium Nitrate	44.0%
Chlorinated Latex Rubber	17.0%
Magnesium	17.0%
Titanium	13.0%
Red Gum	9.0%
Total:	100.00%

### **Silver Gerb Formula:**

Potassium Nitrate	51.0%
Charcoal	9.0%

Sulfur	10.0%
Titanium	30.0%
Total:	100.00%

**Yellow Gerb Formula:**

For colored flames, without sparks, omit the titanium:

Barium Nitrate	26.0%
Sodium Nitrate	18.0%
Chlorinated Latex Rubber	17.0%
Magnesium	17.0%
Titanium	13.0%
Red Gum	9.0%
Total:	100.00%