

Various interesting smoke compositions from the book
„The preparatory of black powder and pyrotechnics“

27. 05-03-018A: White spotting smoke composition for artillery and mortar training and similar use: 40% zinc, 20% potassium nitrate, 20% aluminum, 20% potassium perchlorate

40. 05-03-023A: Non organic-chlorine containing white smoke composition for screening: 49.2% potassium ferric chloride, 37.8% zinc oxide, 10.1% aluminum, 2.7% sodium nitrate, 0.20% moisture

48. 05-03-029A: Brown smoke composition: 50% copper-II-oxide, 35% lead dioxide, 15% magnesium powder

58. 05-03-036A: Opaque smoke composition for marine use: 40% sodium nitrate, 22.5% ammonium chloride, 20% antimony trisulfide, 12.5% sulfur, 5% coal pitch

60. 05-03-036C: Opaque smoke composition for marine use: 38.46% sodium nitrate, 25.64% ammonium chloride, 20.51% antimony trisulfide, 12.82% sulfur, 2.56% coal pitch, 0.01% mixed balance

Percentage: 50% potassium nitrate, 30.18% charcoal, 7.54% lampblack, 6.6% sulfur, 5.66% rice starch, 0.02% residual balance

07-04-012A: Simple white smoke strobe star:

As in previous examples, into a suitable mixing bowl, or similar container, equipped with motorized stirrer in the usual manner, place 400 milliliters of 95% ethyl alcohol, and then add in 120 grams of glutinous rice starch, followed by 640 grams of finely ground charcoal, followed by 160 grams of lampblack, followed by 140 grams of flours of sulfur, and then followed by 1060 grams of potassium nitrate. Thereafter, blend the mixture for about 30 minutes. Thereafter, the mixture is ready for use. To use, the mixture simply needs to be rolled into stars of any desired diameter, or rolled onto existing stars to form an outer layer, and then cured in an oven at ordinary temperature in the usual manner. The mixture can be used in loose form of any desired grain size, or pressed into pellets, tablets, ect., Prime with any desired mixture.

07-04-016A: Standard white smoke composition for use in fireworks.

Into a suitable ball mill, filled with 200 grams of Teflon coated steel shot of the usual diameter and weight, place *200 grams of potassium nitrate*, followed by *250 grams of standard wood charcoal*, followed by *500 grams of flours of sulfur*, and then followed by *150 grams of finely ground wood dust*, and then tumble the mixture on moderate speed for about 30 to 45 minutes to form a uniform mixture. Thereafter, the mixture is ready to be pressed. To do so, simply place the mixture into any desirable mixing container equipped with motorized stirrer, and then add in 75 milliliters of alcohol, and then blend the mixture for about 10 minutes to form a mild paste. Thereafter, simply press the pasty mass into any desirable container, mold, cone, tube, ect under a pressure of about 6000 psi in the usual manner, and then allow the firework munitions to cure. Can be ignited using any standard means.

Explosive ability: None.

Percentage: *45.45% sulfur, 22.72% wood charcoal, 18.18% potassium nitrate, 13.63% wood dust, 0.02% impurities* (Standard consumer fireworks composition).