The Chemistry of Firework Colours



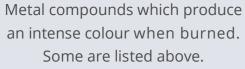












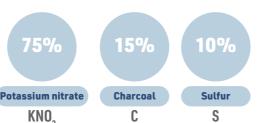






Fuel

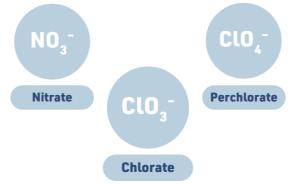
Gunpowder composition



ENERGY DENSITY: 3 MEGAJOULES PER KG

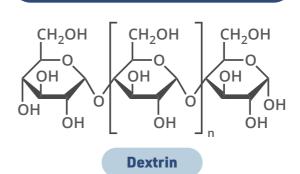
Allows firework to burn; gunpowder, (potassium nitrate, sulfur & charcoal), is often used.

Oxidiser



Usually nitrates, chlorates or perchlorates; required to provide oxygen for the combustion of fuel.

Binder



Holds the mixture together; the most commonly used is a starch, dextrin, dampened with water.

(common binder)

Chlorine donor



Chlorine donors help strengthen some colours. Some oxidisers can also act as chlorine donors.