THE CHEMISTRY OF FIREWORK COLOURS



COLOUR PRODUCERS







Metal compounds which produce an intense colour when burned. Some are listed above.

FUEL

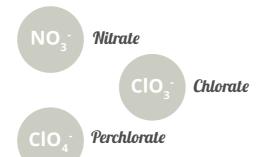
Gunpowder Composition



ENERGY DENSITY 3 MEGAJOULES PER KG

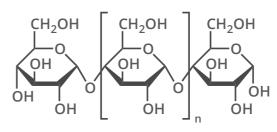
Allows firework to burn; gunpowder, (potassium nitrate, sulfur & charcoal), is often used.

OXIDISER



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

BINDER



Dextrin (common binder)

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

CHLORINE DONOR





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









