

# THE CHEMISTRY OF FIREWORKS



## RED

### STRONTIUM SALTS

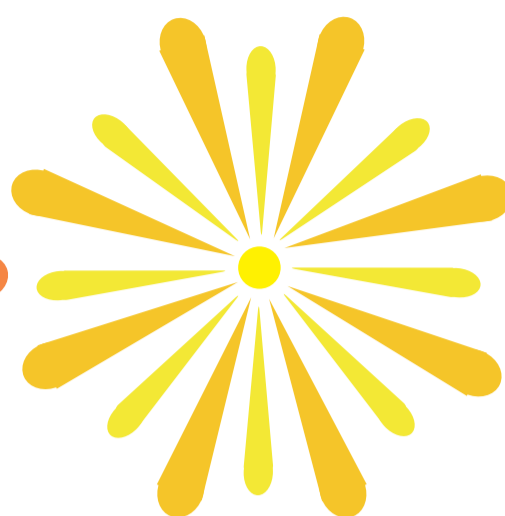
Strontium Nitrate  
Strontium Carbonate  
Strontium Sulfate



## ORANGE

### CALCIUM SALTS

Calcium Carbonate  
Calcium Chloride  
Calcium Sulfate



## YELLOW

### SODIUM SALTS

Sodium Nitrate  
Sodium Oxalate  
Cryolite



## GREEN

### BARIUM SALTS

Barium Nitrate  
Barium Carbonate  
Barium Chloride  
Barium Chlorate



## BLUE

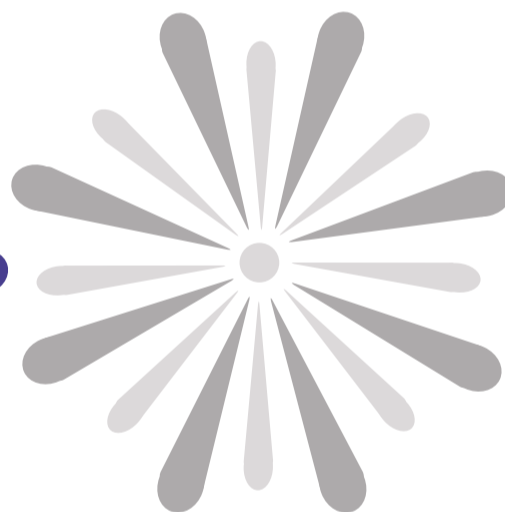
### COPPER SALTS

Copper (I) Chloride  
Copper Carbonate  
Copper Oxide



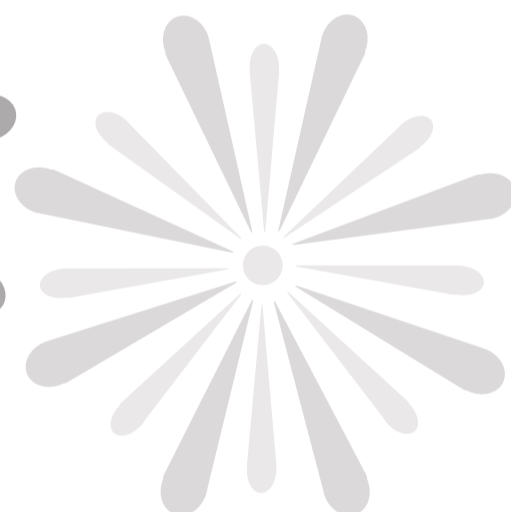
## PURPLE

COMBINE COPPER  
& STRONTIUM  
COMPOUNDS



## SILVER

WHITE HOT  
MAGNESIUM &  
ALUMINIUM



## WHITE

BURNING METAL  
Magnesium  
Aluminium  
Titanium

Colour in fireworks is produced by pyrotechnic 'stars', which produce coloured light when ignited. The stars contain five basic ingredients. **Metal salts** are used to produce colour; a **fuel** is needed to allow the star to burn; an **oxidising chemical** provides oxygen for the combustion of the fuel; a **chlorine-donating compound** helps strengthen some colours; and a **binding chemical** holds the mixture together.

