## **Phosphorus**

P

**Melting Point** 

44.1°C

**Boiling Point** 

280°C

**Density** 

1.8 g/cm<sup>3</sup>

**Appearance** 

Phosphorus occurs in more than one form. One of these is waxy and white, and another is a dark red powder.

**Other Physical Properties** 

The waxy, white form of phosphorus glows in the dark.

**Chemical Properties** 

Phosphorus is insoluble in water. The waxy, white form is very reactive and can explode in air (it burns at 35°C). It is also very poisonous. The powdered form is less reactive, although it burns in air. It is not very toxic.

Compounds

Calcium phosphate, a natural rock used to make phosphate fertilizer, is one compound of phosphorus.

Uses

Phosphorus is alloyed with bronze. It is also used in incendiary bombs and match heads.

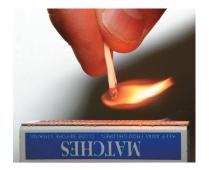
**Notes** 

Phosphorus compounds play an important role in the utilization of energy in living things.



## ▶ PHOSPHATE SMELTING FURNACE CIRCA 1940

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MATCH HEADS ARE MADE FROM PHOSPHORUS COMPOUNDS, WHICH IGNITE WHEN RUBBED AGAINST A ROUGH SURFACE.

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