

IS 2012: Red Phosphorus Specification

Red phosphorus is one of the most important raw materials used in the manufacture of safety matches. It is also used in appreciable quantities in metallurgy and for the manufacture of fireworks. Though the present indigenous requirements for this important material are met by imports, efforts are being made to start its manufacture in India.



Scope : This standard prescribes the requirements and the methods of sampling and test for red phosphorus, suitable for match industry and general industrial use.

Overview of specifications: Red phosphorus should be a dark red, contamination-free powder with 97.5% purity, <0.2% moisture, and <1.5% water-soluble content.

- **Safety:** It must be free from white phosphorus. For defense applications, copper and iron levels must not exceed 50 ppm.
- **Packaging:** Packed in airtight, labeled containers indicating weight, manufacturing date, and “Flammable” caution label.
- **Testing:** Standardized tests ensure purity, absence of white phosphorus, and safety.

This standard enables safe and consistent industrial use of red phosphorus, with enhanced specifications for defense.