

Trisodium Phosphate Dodecahydrate

Suggested applications

Used as a water softening agent, anticrustator in industrial boiler, cleaning agent in electroplating, floatation in mining and flux in enamel ware manufacturing, etc. It plays an important role in textile dyeing, detergent and metal surface treatment, etc.

Physical properties

White or slight pale yellow dry crystals, bulk density 1.3-1.54 g/cm³, easily soluble in water but not in organic solution. Its water solution is alkaline, melting point is 73.4 °C. The material can absorb moisture easily. After long time shipment it may get caked, but the caking can be scrunched easily.

Packaging & Storage

Packed in 25kg or 1000kg PP+PE bags.
Customized bags packing is available.
Stored at cool, dry and well ventilated place.

Target properties

Chemical formula	Na ₃ PO ₄ · 12H ₂ O
Molecular weight	380.14
Main contents% ≥	98
Phosphorus Pentoxide(P₂O₅)% ≥	18.3
Sodium oxide, as Na₂O	16-19
Sulfate, as SO₄ % ≤	0.2
Fluoride as F % ≤	0.2
Chloride, as Cl % ≤	0.2
Asenic, as As % ≤	0.005
Iron, as Fe % ≤	0.01
Water insoluble% ≤	0.1
PH value of 1% solution	11.5-12.5

*permissible tolerance of 0.1-0.2% is possible for main content and moisture due different testing methods under diverse conditions