

SPECIFICATION

Product Name: Sodium Dihydrogen Phosphate Dihydrate BP Grade
Chemical Formula: $\text{NaH}_2\text{PO}_4 \cdot 2\text{H}_2\text{O}$
CAS Number: 13472-35-0
Molecular Weight: 156.01 g/mol
Appearance: White or almost white powder or colorless crystals
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Identification A) Solution Characteristic B) Reaction of phosphate C) Reaction of sodium	-	Complies	A) Solution is slightly acid. B) It gives reaction of phosphates. C) It gives reaction of sodium.
Appearance of 10% w/v solution	-	4.34	4.2 – 4.5
Reducing Substances	-	Complies	Color of the permanganate should not completely discharge.
Chloride	PPM	Complies	NMT 200 PPM
Sulphate	PPM	Complies	NMT 300 PPM
Iron	PPM	Complies	NMT 10 PPM
Loss on drying (At 130°C)	%	23.68%	21.5% - 24.0%
Assay (on dry basis)	%	100.12%	98.0% - 100.5% of NaH_2PO_4

Physical Properties

- Solubility: Freely soluble in water. Insoluble in ethanol. Insoluble in acetone. Insoluble in ether. Insoluble in chloroform. Insoluble in methanol.

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a tightly closed container in a cool, dry, and well-ventilated place, protected from moisture, humidity, and contamination.

Applications

- Use: Widely used in pharmaceutical, nutraceutical, food, laboratory, and industrial applications. It functions primarily as a buffering agent, pH regulator, phosphate source, and stabilizer.
- Dosage: Depends on Desired pH, Buffer capacity, Phosphate concentration, Product formulation, Regulatory requirements, Intended application.

Packaging

- Standard Packing: 50 Kgs woven pp bag with inner liner and 100 Grams or as per customer requirement.
 - Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.
- * Specifications are based on the manufacturer's provided specifications.