

# Sodium phosphate monobasic anhydrous

Meets USP-NF, BP and IP testing specifications

Product Code: TC459M

## Product Description :

Molecular weight: 119.98  
Molecular formula:  $\text{NaH}_2\text{PO}_4$   
CAS No.: 7558-80-7

## Quality Control:

### Appearance (USP)

Colorless crystals, or white crystalline powder, slightly deliquescent

### Appearance (BP)

White slightly deliquescent crystals or granules

### Appearance (IP)

A white powder or colourless crystals

### Solubility (USP)

Freely soluble in water, practically insoluble in alcohol

### Solubility (BP)

Very soluble in water, very slightly soluble in ethanol (96%)

### Solubility (IP)

Very soluble in water, very slightly soluble in ethanol

### Identification A : Sodium (USP)

Meets the requirements

### Identification A (BP)

10% solution in water is faintly acid

### Identification A (IP)

Reactions for phosphates

### Identification B : Phosphate (USP)

Meets the requirements

### Identification B (BP)

10% solution in water yields the reaction characteristics of phosphates

### Identification B (IP)

Reactions for sodium salts

### Identification C (BP)

10% solution in water neutralize with 10% w/v solution of potassium hydroxide yields reaction A characteristics of sodium salts

### Identification D : Loss on drying (BP)

$\leq 1.0\%$  (at  $130^\circ\text{C}$  to constant weight)

### pH (5 % in water at $25^\circ\text{C}$ ) (USP, IP)

4.1 - 4.5

### Clarity and color of solution (BP)

10% solution in water is clear and colorless

### Acidity : pH (BP)

4.2 - 4.5 (mixture of 5 mL of solution S and 5 mL of water)

### Chloride (USP, IP)

$\leq 0.014\%$

### Chloride (BP)

$\leq 0.02\%$

### Sulfates (USP, IP)

$\leq 0.15\%$

### Sulfate (BP)

$\leq 0.03\%$

### Iron (BP)

$\leq 0.001\%$

### Insoluble substances (USP, IP)

$\leq 0.2\%$

### Arsenic (USP, IP)

$\leq 0.0008\%$

### Arsenic (BP)

$\leq 0.0002\%$

### Reducing substances (BP)

The solution retains a slight red colour

### Aluminium, Calcium, and related elements (USP, IP)

The sample solution does not become turbid when rendered slightly alkaline to litmus paper with 6N ammonium hydroxide

**Heavy metals (IP)**

<= 0.002%

**Water (K.F.) (USP, IP)**

<= 2.0%

**Loss on drying (BP)**

<= 1.0% (at 130°C to constant weight)

**Assay (NaOH T, on anhydrous basis)(USP, IP)**

98.0 - 103.0%

**Assay (NaOH T, dried substance)(BP)**

98.0 - 100.5%

**Storage and Shelf Life:**

Store below 30°C away from bright light.

Shelf life is 48 months.

Use before expiry date given on the product label.

Revision : 03/2024

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