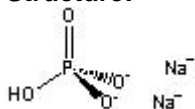


## TECHNICAL INFORMATION

Catalog Number: 191440, 191441, 194739, 194849, 195501

### Sodium phosphate dibasic

**Structure:**



**Molecular Formula:**

**Anhydrous**

Na<sub>2</sub>HPO<sub>4</sub>

**Heptahydrate**

Na<sub>2</sub>HPO<sub>4</sub>·7H<sub>2</sub>O

**Molecular Weight:**

141.96

268.07

**CAS #**

7558-79-4

7782-85-6

**Synonyms:** Disodium hydrogen phosphate; Dibasic sodium phosphate; Disodium orthophosphate; Disodium phosphate; DSP; Phosphate of soda; Secondary sodium phosphate

**Physical Description:** White crystalline powder. **Note:** the anhydrous material tends to take on approximately 2 to 7 moles of water on exposure to air; the heptahydrate form is stable in air.<sup>1</sup>

**Solubility:** Soluble in water, but more soluble in hot water; insoluble in alcohol, ethanol. pH of a 1% aqueous solution 9.1 (anhydrous) and 9.5 (heptahydrate).<sup>1</sup>

**Typical Uses:**<sup>1</sup>

- as sequestrant, emulsifier and buffer in foods.
- as mordant in dyeing
- for weighting silk
- in tanning
- in manuf of enamels, ceramics, detergents, boiler compds; as fireproofing agent
- in soldering and brazing instead of borax; as reagent and buffer in analytical chemistry
- cathartic.
- laxative.

**Availability:**

Catalog Number	Description	Size
194739	Sodium Phosphate Dibasic, Anhydrous, cell culture reagent	100 g 500 g 1 kg 5 kg
195501	Sodium Phosphate Dibasic, Anhydrous	100 g 500 g 1 kg 5 kg
191440	Sodium Phosphate Dibasic, Anhydrous, ACS Reagent Grade	100 g 500 g 1 kg 5 kg
194849	Sodium Phosphate Dibasic, Anhydrous, molecular biology reagent	250 g 500 g 1 kg
191441	Sodium Phosphate Dibasic, Heptahydrate, ACS Reagent Grade	100 g 500 g 1 kg 5 kg

## References:

- *Merck Index*, **12th Ed.**, No. 8805
- Dawson, R.M.C., et al. (eds), *Data for Biochemical Research*, **3rd Ed.**, Clarendon, Oxford, 421 (1986).