

Riboflavin / B2-5 Phosphate

Water-soluble Vitamin B2 and its phosphate ester

Product Description

Riboflavin (Vitamin B2) and Riboflavin-5-Phosphate Sodium are used in multivitamin preparations, parenteral nutrition and food fortification. Available to BP/USP standards.

Certificate of Analysis

HSN Code: 2936.22 CAS Number: Riboflavin: 83-88-5 / Riboflavin-5-Phosphate: 138-40-9 / Nutraceuticals: 2846-10-8

Parameter	Specification	Test Method
Appearance	Yellow to orange crystalline powder	Visual
Assay	98.0–102.0%	UV spectrophotometry (444 nm)
Identification	UV absorption maximum at 444 nm	UV
Melting Point	>300°C (decomp.)	USP <741>
pH (Riboflavin: saturated aq.)	5.5–7.0	USP <791>
pH (R5P: 2% aq.)	5.0–6.5	USP <791>
Loss on Drying	"d 1 . 5 %	USP <731>
Heavy Metals	"d 2 0 p p m	USP <231>

Physical Properties

Appearance: Yellow to orange crystalline powder
Molecular Formula: $C_{17}H_{20}N_4O_6$ (riboflavin)
Molecular Weight: 376.36 g/mol (riboflavin)
Solubility: Slightly soluble in water; practically insoluble in ethanol
Melting Point: >300°C (decomp.)

Packing: 25 kg HDPE drums with inner polyethylene liner; 1 kg, 5 kg aluminium foil pouches
Storage: Store in a cool, dry, well-ventilated area away from light. Below 25°C. Highly light-sensitive.

Safety & Handling

PPE: Gloves, safety goggles, dust mask, lab coat
Hazards:

- Highly light-sensitive — store in amber containers
- Dust may cause mild respiratory irritation