

SPECIFICATION

Product Name: Vitamin B2 100% USP Grade
Chemical Formula: C ₁₇ H ₂₀ N ₄ O ₆
CAS Number: 83-88-5
Molecular Weight: 376.36 g/mol
Appearance: A Yellow Crystalline Powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification	-	Complies	The sample solution in pale greenish yellow by transmitted light. By reflected light, it exhibits an intense yellowish-green fluorescence that disappears upon the addition of mineral acids or alkalis.
Assay (On dried basis)	%	99.09%	98.0% -102.0%
Residue on ignition	%	0.06%	NMT 0.3%
Limit of Lumiflavin	-	0.018	Absorbance is NMT 0.025
Specific optical rotation	°C	-130°C	-115°C to -135°C
Loss on drying	%	1.25%	NMT 1.5%

Physical Properties

- Solubility: Slightly soluble in water. Partially insoluble in ethanol. Insoluble in Acetone. Insoluble in ether. Insoluble in chloroform.

Shelf Life & Storage

- Shelf Life: 3 years from date of manufacture under recommended storage.

- Storage Conditions: Store in a tightly closed, light-resistant container in a cool, dry, and well-ventilated place, protected from moisture, humidity, heat, and direct sunlight. Keep the container tightly sealed when not in use.

Applications

- Use: Widely used in pharmaceutical, nutraceutical, food, beverage, and animal nutrition applications. It plays a key role in energy metabolism, cellular function, and the maintenance of overall health.

- Dosage: Depends on Age and physiological status, Nutritional requirements, Intended application, Product formulation, Regulatory guidelines.

Packaging

- Standard Packing: 25 kgs Fiber Drum 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.