

SPECIFICATION

Product Name: Niacinamide (Vitamin B3)- Indian Make
Chemical Formula: C ₆ H ₆ N ₂ O
CAS Number: 98-92-0
Molecular Weight: 122.12 g/mol
Appearance: White Crystalline Powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Identification	-	128°C to 130°C Complies Complies Complies Complies	A. By Melting Point 128°C to 131°C B. By Infrared Spectrophotometer C. By heating pyridine is evolved D. By chemical test (Ammonia is evolved) E. By chemical test (Golden yellow colour develops)
Appearance of solution	-	Complies	A 5.0% solution in carbon dioxide free water is clear and not more intensely colored than reference solution BYS7
pH	-	6.74	6.0 to 7.5 determined in 5% w/v solution
Related substances (By T.L.C.)	-	Complies	Any secondary spot in the chromatogram obtained with the test solution is not more intense than the spot in the chromatogram obtained with the reference solution.
Heavy metals	PPM	<30 PPM	NMT 30 PPM
Chlorides	PPM	<250 PPM	NMT 250 PPM
Sulphates	PPM	<125 PPM	NMT 125 PPM
Sulphated ash	%	0.05%	NMT 0.10%

Loss on drying	%	0.2%	NMT 0.5%
Assay (On dry basis)	%	99.7%	NLT 99.0% and NMT 101.0% (By titration)
	%	99.6%	NLT 99.0% and NMT 101.0% (By HPLC)

Physical Properties

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

Shelf Life & Storage

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

Applications

- Use: Widely used as a nutritional supplement, vitamin fortification ingredient, pharmaceutical active ingredient, and cosmetic ingredient. It plays an essential role in energy metabolism, normal nervous system function, and healthy skin
- Dosage: Depends on the intended application, age group, nutritional requirements, and applicable 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.