

SPECIFICATION

Product Name: Vitamin B3 (Niacin) IP Grade
Chemical Formula: $C_6H_5NO_2$
CAS Number: 59-67-6
Molecular Weight: 123.11 g/mol
Appearance: White crystalline and creamy white powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification (A)	-	Complies	A. By infrared absorption
Identification (B)	-	Complies	B. By chemical test (Pyridine evolved)
Identification (C)	-	Complies	C. By chemical test (Blue precipitation)
Identification (D)	-	Complies	D. By chemical test (Golden yellow colour is produced)
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 (NMT 0.01%)
Heavy metals	PPM	Less than 20 PPM	NMT 20 PPM
Chlorides	PPM	Less than 250 PPM	NMT 250 PPM
Sulphated ash	%	0.06%	NMT 0.10%

Loss on drying	%	0.3%	NMT 1.0%
Assay by titration (on dried basis)	%	99.8%	NLT 99.5% and NMT 100.5% of $C_6H_5NO_2$

Physical Properties

- Solubility: Soluble in boiling water and in boiling ethanol (95%); sparingly soluble in water; very slightly soluble in chloroform; practically insoluble in ether. It dissolves in dilute solutions of alkali hydroxides and carbonates.

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a well-closed, airtight container. Keep in a cool, dry place. Protect from light and moisture. Avoid exposure to excess heat. Keep away from incompatible substances.

Applications

- Use: Used in tablets, capsules, and syrups for the treatment and prevention of Niacin deficiency (Pellagra). Supports energy metabolism by helping convert carbohydrates, fats, and proteins into energy. Used (under medical supervision) to help manage cholesterol levels.
- Dosage: Depends on age, condition, and therapeutic purpose.

Packaging

- Standard Packing: 25 kg woven PP bags with inner liner, 1 kgs and 100 grams, 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.