

SPECIFICATION

Product Name: Vitamin B5 IP Grade
Chemical Formula: C ₉ H ₁₇ NO ₅
CAS Number: 137-08-6
Molecular Weight: 219.24 g/mol
Appearance: A white powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification A: TLC Complies. B: A solution (1 in 20) responds to the tests for calcium. C: The solution is blue and purple. D: The solution is bright yellow.	-	Conform	Conform
Content of calcium pantothenate (Calculated on the mass of dried product)	%	99.1%	98.0 ~ 101.0
Specific rotation (calculated on the mass of dried product)	°	+27.0°	+25.0° ~ +27.5°
PH	-	7.2	6.8 ~ 8.0
Loss on dried	%	0.7	≤ 3.0
3-Aminopropionic Acid	%	0.48	≤ 0.5
Heavy metals	PPM	Conform	≤ 20 PPM
Total Aerobic bacterias	cfu/g	4	≤ 1000 cfu/g
Yeast & Mold	cfu/g	1	≤ 100 cfu/g
E-coli	g	Not Detected	Negative/10g

Salmonella	g	Not Detected	Negative/g
------------	---	--------------	------------

Physical Properties

- Solubility: Freely soluble in water. Slightly soluble in ethanol. Slightly soluble in Methanol. 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, excessive heat, and direct sunlight.

Applications

- Use: Widely used in pharmaceutical, nutraceutical, food, beverage, cosmetic, and animal nutrition applications.
- Dosage: Depends on Age and physiological status, Nutritional requirements, Product formulation, Intended application, 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.