

SPECIFICATION

Product Name: Pregelatinized Starch IP Grade
Chemical Formula: (C ₆ H ₁₀ O ₅) _n
CAS Number: 9005-25-8
Molecular Weight: 342.295 g/mol
Appearance: White or yellowish white powder
Odor: Odorless.

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification Test:			
Test- A Examined under a microscope	-	Complies	Under polarized light (between crossed nicol prisms), starch granules with a distinct black cross intersecting at the hilum may be seen.
Test- A Water slurry of it's coloured by iodine TS	-	Complies	Should be orange- red to deep blue.
Test- B Disperse 0.5 g in 2 ml of water R, without heating and add 0.05 ml of iodine solution.	-	Complies	A reddish violet or blue color produced.
PH	-	5.65	4.5 to 7.0
Oxidizing substances	-	Complies	It complies with the test for oxidizing substance
Sulfur dioxide	PPM	Complies	NMT 50 PPM
Iron Test	PPM	Complies	Max. 20 PPM

Foreign matter	-	Complies	Not more than traces of matter other than starch granules are present
Loss on drying	%	3.60%	Max. 14.0% w/w
Sulphated Ash	%	0.36%	Max. 0.5%
Cold- water soluble matter	%	13.95%	10 – 20%
Particle size	%	100.00%	95% passing through 60 Mesh
Microbiological Limits			
Total Aerobic Microbial Count	cfu/g	Complies	NMT 1000cfu/g
Total Yeast and Mold Count	cfu/g	Complies	NMT 100cfu/g
Escherichia Coli	Absent	Absent	Should be absent
Salmonella	Absent	Absent	Should be absent

Physical Properties

- Solubility: Dispersible and partially soluble in water. More readily dispersible and partially soluble in hot water. Practically insoluble in ethanol. 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 container in a cool, dry, and well-ventilated place, protected from moisture, humidity, and direct sunlight. Keep the container tightly sealed when not in use to prevent moisture absorption, caking, and microbial contamination.

Applications

- Use: Widely used as a binder, disintegrant, diluent, and thickening agent in pharmaceutical, nutraceutical, and food formulations. Its ability to hydrate rapidly in cold water makes it particularly useful in direct-compression and instant-mix applications.
- Dosage: Depends on its function in the formulation (binder, disintegrant, or diluent) and the type of product being manufactured.

Packaging

- Standard Packing: 25 kg woven PP bags with inner liner 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.

