

Product Data Sheet

Cationic Starch

Description

Description	Cationic Starch is a chemically modified starch ether carrying a positive charge (typically via quaternary ammonium substitution), enabling it to bind strongly to negatively charged surfaces such as cellulose fibre. This property makes it the standard wet-end additive in paper manufacturing for dry strength, retention and drainage, and a widely used textile sizing and water-treatment flocculation aid.
Applications	Paper wet-end additive – dry strength, retention and drainage aid Textile sizing Water treatment flocculation aid Adhesive formulations requiring substrate affinity
Grade	Standard Industrial Grade
CAS No.	Cationic starch ether; base starch CAS 9005-25-8

Key Benefits

1. Strong binding affinity to negatively charged cellulose fibre – the defining property behind its paper-industry dominance
2. Improves paper dry strength, retention and drainage performance in the wet end of paper manufacturing
3. Effective flocculation aid in water treatment applications
4. Widely accepted, fastest-growing segment of the modified starch market given strong paper and textile demand

Chemical Analysis & Physical Data

Typical Specification

Parameter	Test Method	Unit	Specification
Nitrogen Content (Cationic Substitution)	Kjeldahl Method	wt%	0.3 – 1.0
Viscosity (Cooked Paste, Brookfield)	Viscometer Method	mPa·s	Application-dependent, confirm with buyer
Charge Density	Titration Method	–	Positive (cationic)
Moisture	Oven-Drying Method	wt%	Max. 13.0
pH (1% Slurry)	pH Meter	–	5.0 – 8.0
Appearance	Visual	–	White to off-white powder

Packaging

Packaging 25 kg Kraft Paper Bags (PE-lined)
500 kg / 1,000 kg Jumbo Bags (FIBC)
Custom packaging available on request.

Storage & Handling

1. Store in a cool, dry, well-ventilated warehouse away from moisture
2. Keep bags sealed until point of use to prevent moisture pickup and microbial spoilage
3. Stack on pallets, away from direct ground contact
4. Use appropriate PPE (dust mask, goggles) when handling – avoid dust generation

Quality Assurance

1. Every batch is tested against the specification above before dispatch
2. A batch-specific Certificate of Analysis (COA) accompanies each shipment, reporting nitrogen content, viscosity and moisture against this TDS
3. COA available on request prior to shipment for buyer pre-approval

4. Third-party inspection (SGS/Intertek) can be arranged on request for regulated-market shipments

Disclaimer: The information provided in this document is based on our current knowledge and is intended as a general guide. Ochnology Solution Pvt. Ltd. reserves the right to modify specifications without prior notice. Buyers are advised to conduct their own testing for specific applications. A batch-specific Certificate of Analysis (COA) is available on request for each shipment.