



INGREDIENT STORY

Chitosan oligosaccharide (COS) is a shorter-chain derivative produced from chitosan. The supplied SY brochure lists a powder and a separate approximately 10% aqueous solution reference. Compare current documents before selecting between supplier grades.

FROM MARINE CHITIN TO COS



Based on the supplied Zhongsheng flyer, the described upstream route starts with chitin from shrimp and crab shells, converted to chitosan and then enzymatically hydrolyzed to COS. Confirm the actual source and process for each lot.

RESEARCH LENS | PLANT SCIENCE

Published studies explore COS in relation to plant defense signaling and stress-response pathways. Results depend on the COS structure and trial conditions; this is general research context, not evidence for this offered grade.

Liu et al., Carbohydrate Polymers (2023), DOI: 10.1016/j.carbpol.2022.120344.

Agricultural COS | Product details

Supplier references summarized from the brochure provided for preliminary buyer review.

GRADE SNAPSHOT

Parameter	SUPPLIER FLYER VALUES
Appearance	Light yellow to light brown powder
Assay	>= 90%
Convertible glucosamine	>= 60%
Molecular weight	322-2200 Da
Moisture / insolubles	<= 10% / <= 0.5%
pH (1% solution)	3.0-6.0
As / Pb / Hg	<= 5 / 30 / 3 mg/kg

PRODUCT FORMS

SY | Powder

Light yellow to light brown powder. Supplier flyer lists assay >=90%.

SYT | Aqueous solution

Supplier flyer lists 11.0 +/- 1.0% assay. Confirm basis and grade identity.

PACKAGING & HANDLING

The brochure lists 25 kg cardboard drums for the powder and 25 kg plastic or ton drums for the liquid. Confirm the exact pack for the requested grade.

Keep sealed in a dry, clean, cool place, away from contaminating materials and rain. Follow the label for the supplied grade.

WHERE BUYERS EVALUATE COS

Seed treatment, foliar application and irrigation are formulation routes to discuss with the technical supplier. Match the route, concentration and timing to the current grade label and local requirements.

Important: Research context is general literature, not proof of the performance of this specific grade. Confirm grade identity, current specification, batch COA, intended use, inclusion guidance and destination-market requirements before purchase or use.

Research background: Liu et al., Carbohydrate Polymers (2023), DOI: 10.1016/j.carbpol.2022.120344.

BUILD YOUR TECHNICAL REVIEW

Ask Luma Ingredients for the current grade specification, lot-specific COA, pack options and an application discussion for your target market.

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