

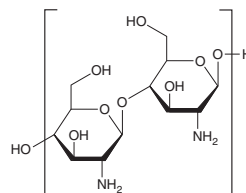
PRODUCT INFORMATION



Chitosan oligosaccharide

Item No. 45759

CAS Registry No.: 148411-57-8
Formal Name: 2-hydroxypropanoate ester, chitosan
Synonyms: Chitooligosaccharide, COS
MF: $(C_{12}H_{24}N_2O_9)_n$
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Chitosan oligosaccharide is supplied as a solid. Aqueous solutions of chitosan oligosaccharide can be prepared by directly dissolving the solid in aqueous buffers. Chitosan oligosaccharide is slightly soluble (0.1-1 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Chitosan oligosaccharide is a degradation product of chitin and chitosan formed via chemical hydrolysis or enzymatic degradation.^{1,2} It is composed of oligomers of β -(1,4)-linked D-glucosamine. Formulations containing chitosan oligosaccharide have been used as dietary supplements and fertilizers and in cosmetics. This product has a degree of polymerization (DP) of 13, a degree of deacetylation (DAC) of >90%, and an average molecular weight of 4-5 kDa.

References

1. Naveed, M., Phil, L., Sohail, M., et al. Chitosan oligosaccharide (COS): An overview. *Int. J. Biol. Macromol.* **129**, 827-843 (2019).
2. Tao, W., Wang, G., and Wei, J. The role of chitosan oligosaccharide in metabolic syndrome: A review of possible mechanisms. *Mar. Drugs* **19**(9), 501 (2021).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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