

Product Information

Chitosan, Medium molecular weight (MMW)

Cat. No.: X23-09-YW026

Size: 50 g; 250 g

MDL: MFCD00161512

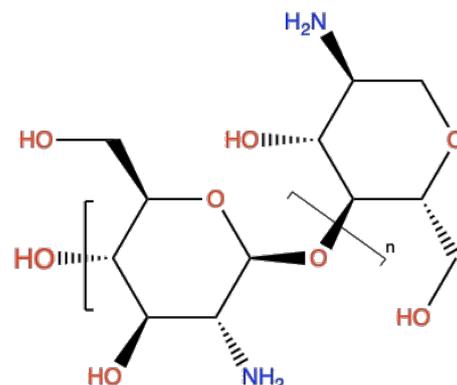
CAS Number: 9012-76-4

PubChem CID: 71853

NACRES: NA.23

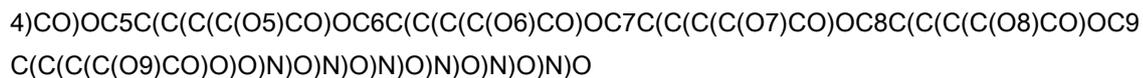
Synonym: Deacetylated chitin; Poly(D-glucosamine)

This product is for research use only and is not intended for diagnostic use.



Product Information

Description	Medium-molecular-weight chitosan can be used in agriculture as a natural pesticide and plant growth enhancer. It can also be used in wastewater treatment for its ability to remove heavy metal ions. And its viscosity is 200-800 cP, 1 wt. % in 1% acetic acid.
IUPAC Name	Methyl <i>N</i> -[(2 <i>S</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>S</i> ,6 <i>R</i>)-5-[(2 <i>S</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>S</i> ,6 <i>R</i>)-3-amino-5-[(2 <i>S</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>S</i> ,6 <i>R</i>)-3-amino-5-[(2 <i>S</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>S</i> ,6 <i>R</i>)-3-amino-5-[(2 <i>S</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>S</i> ,6 <i>R</i>)-3-amino-5-[(2 <i>S</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>S</i> ,6 <i>R</i>)-3-amino-4,5-dihydroxy-6-(hydroxymethyl)oxan-2-yl]oxy-4-hydroxy-6-(hydroxymethyl)oxan-2-yl]oxy-4-hydroxy-6-(hydroxymethyl)oxan-2-yl]oxy-4-hydroxy-6-(hydroxymethyl)oxan-2-yl]oxy-4-hydroxy-6-(hydroxymethyl)oxan-2-yl]oxy-2-[(2 <i>S</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>S</i> ,6 <i>R</i>)-5-amino-6-[(2 <i>S</i> ,3 <i>R</i> ,4 <i>R</i> ,5 <i>S</i> ,6 <i>R</i>)-5-amino-4,6-dihydroxy-2-(hydroxymethyl)oxan-3-yl]oxy-4-hydroxy-2-(hydroxymethyl)oxan-3-yl]oxy-4-hydroxy-6-(hydroxymethyl)oxan-3-yl]carbamate
InChI	InChI=1S/C56H103N9O39/c1-87-56(86)65-28-38(84)46(19(10-74)96-55(28)104-45-18(9-73)95-49(27(64)37(45)83)97-39-12(3-67)88-47(85)20(57)31(39)77)103-54-26(63)36(82)44(17(8-72)94-54)102-53-25(62)35(81)43(16(7-71)93-53)101-52-24(61)34(80)42(15(6-70)92-52)100-51-23(60)33(79)41(14(5-69)91-51)99-50-22(59)32(78)40(13(4-68)90-50)98-48-21(58)30(76)29(75)11(2-66)89-48/h11-55,66-85H,2-10,57-64H2,1H3,(H,65,86)/t11-,12-,13-,14-,15-,16-,17-,18-,19-,20-,21-,22-,23-,24-,25-,26-,27-,28-,29-,30-,31-,32-,33-,34-,35-,36-,37-,38-,39-,40-,41-,42-,43-,44-,45-,46-,47-,48+,49+,50+,51+,52+,53+,54+,55+/m1/s1
InChI Key	FLASNYPZGWUPSU-SICDJOISSA-N
Canonical SMILES	COC(=O)NC1C(C(C(OC1OC2C(OC(C(C2O)N)OC3C(OC(C(C3O)N)O)CO)CO)CO)OC4C(C(C(C(O



Isomeric SMILES



Form	Powder
Purity	Reported, 75~85% deacetylated.
Solubility	Soluble in dilute aqueous acid.
Applications	Chitosan can be used as a flocculant, protein precipitant, encapsulant, and aqueous thickener.
Storage	Store at 4°C.