

## Product Information

### Trimethyl chitosan, High molecular weight (HMW)

**Cat. No.:** X23-09-YW030

**Size:** 1 g; 2 g

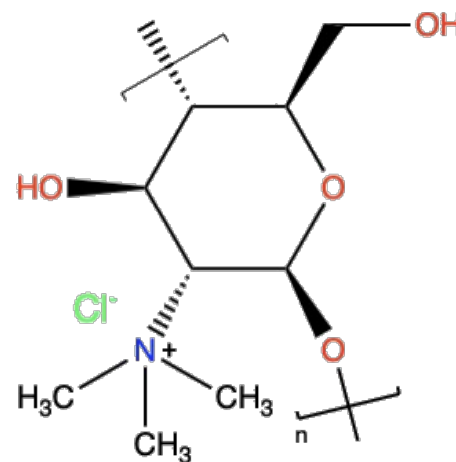
**CAS Number:** 52349-26-5

**PubChem CID:** 168008603

**Synonym:** *N,N,N*-Trimethyl chitosan; Chitosan trimethyl; Mucoadhesive polymers;

TMC Chitosan; *N*-Trimethylchitosan

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



#### Product Information

<b>Description</b>	The quaternization boosts high molecular weight chitosan's water solubility and keeps it soluble throughout a wide pH range. <i>N,N,N</i> -Trimethyl chitosan chloride (TMC) is the most extensively used quaternized chitosan in biomedical applications.
<b>Molecular Formula</b>	$(C_9H_{18}ClNO_4)_n$
<b>IUPAC Name</b>	Azane; [(2 <i>R</i> ,3 <i>R</i> ,4 <i>S</i> ,5 <i>S</i> ,6 <i>S</i> )-4-Hydroxy-6-(hydroxymethyl)-2-methoxy-5-methyloxan-3-yl]-trimethylazanium; Chloride
<b>InChI</b>	InChI=1S/C11H24NO4.ClH.H3N/c1-7-8(6-13)16-11(15-5)9(10(7)14)12(2,3)4;;/h7-11,13-14H,6H2,1-5H3;1H;1H3/q+1;;/p-1/t7-,8-,9-,10+,11-;;/m1../s1
<b>InChI Key</b>	HFNQAFWMDXYZFM-YHSFBLOESA-M
<b>Canonical SMILES</b>	CC1C(OC(C(C1O)[N+](C)(C)C)OC)CO.N.[Cl-]
<b>Isomeric SMILES</b>	C[C@@H]1[C@H](O[C@H]([C@@H]([C@H]1O)[N+](C)(C)C)OC)CO.N.[Cl-]
<b>Form</b>	Light yellow to light brown powder
<b>Purity</b>	Reported, 30~70% quaternized.
<b>Applications</b>	Chitosan has exceptional biological characteristics and is frequently used in medication delivery and tissue engineering research. Chitosan also has hemostatic characteristics, making it an excellent contender for wound dressing applications.
<b>Storage</b>	Store at 4°C.