

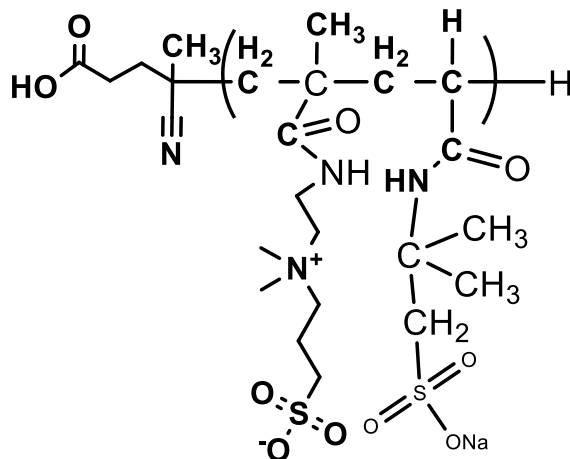
Product Profile

Identification

Product Name: Poly 3-[N-(3-Methacrylamido)propyl-N,N. -dimethylammonio]-propanesulfonate-co-2-acrylamido-2-methylpropane-1-sulfonic acid), Poly(sulfopropylbetaine(SPB)methacrylate based random copolymer.

Product Lot Number: P45096A-MAMDDMAPS-AMDMPStran

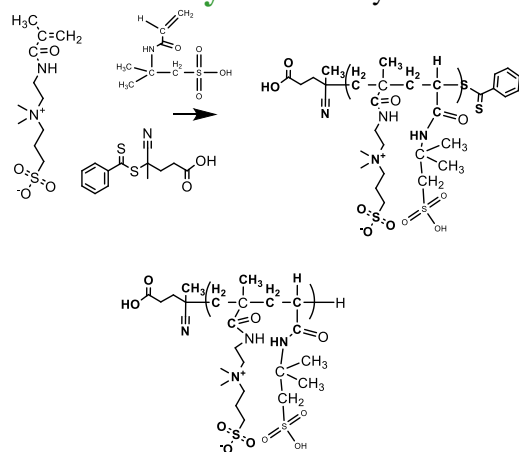
Product Chemical Architecture:



Composition:

Mn x 10 ³	Mw/Mn (PDI)	Composition MAMDDMAPS:AMDMPStran
4.0	1.6	76:24

Method of Synthesis: By RAFT Process



Solubility in different solvents

THF	X	DMSO	√
CHCl ₃	X	DMF	√
Water	√	Acetone	X

Purification of Polymer: By Soxhlet extraction of unreacted RAFT

Validation of Architecture:

A. Gel Permeation Chromatography (GPC), SEC- Profile

Sample of MAMDDMAPS-AMDMPS polymer was eluted in aqueous system using buffer based on borate (0.025M) with disodium tetraborate, (0.025M) NaCl and 0.002M sodium phosphate dibasic, Ph=9.0 aqueous solution. Our columns are from Viscotek at flow rate 1 ml-1

Mn calculated from HNMR and Mw/Mn by GPC Mw/Mn 1.6

B. NMR (HNMR) of polymer:

MAMDDMAPS-AMDMPS

