

Product Profile

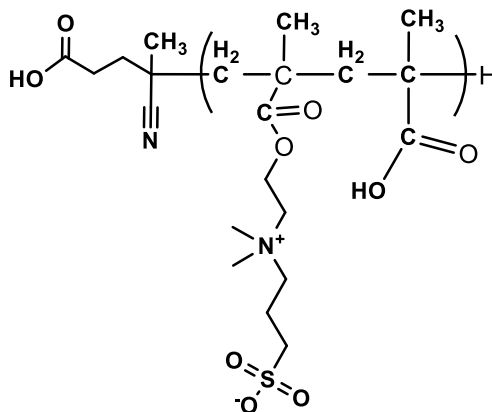
Identification

Product Name: Poly(sulfopropylbetaine (SPB) methacrylate-co-Methacrylic acid), random

or: Poly [2-(Methacryloyloxy)ethyl]dimethyl-(3-sulfopropyl)ammonium hydroxide with Methacrylic acid random copolymer

Product Lot Number: P45074A-DMAPSMAAran

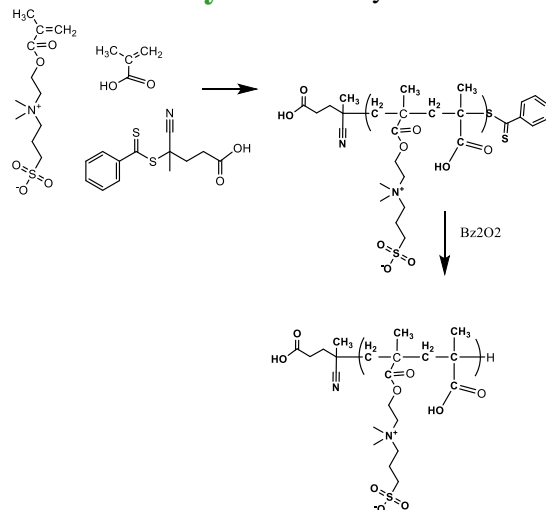
Product Chemical Architecture:



Composition:

Mn x 10 ³	Mw/Mn (PDI)	Composition DMAPS:MAA
3.0	1.6	8:2
DP: DMAPS ₁₁ -MAA ₂		

Method of Synthesis: By RAFT Process



Solubility in different solvents

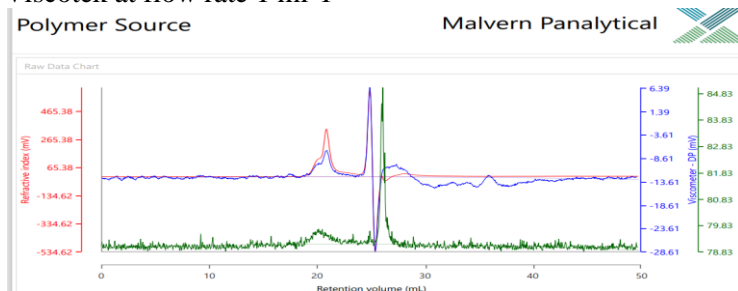
THF	X	DMSO	√
CHCl ₃	X	DMF	√
Water	√	Acetone	X

Purification of Polymer: By Soxhlet extraction of unreacted RAFT

Validation of Architecture:

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

Sample of PDMAPS is 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:

