

Product Profile

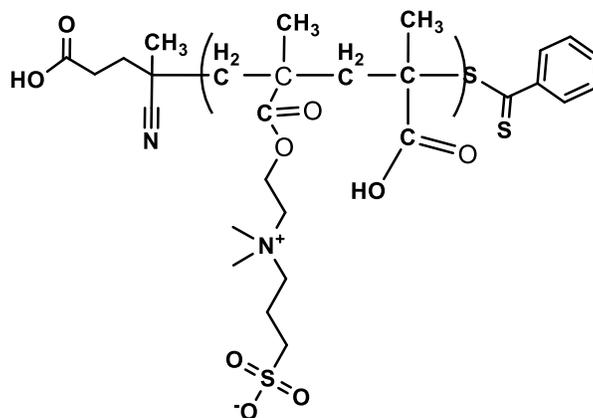
Identification

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: P44932-DMAPSMAAran

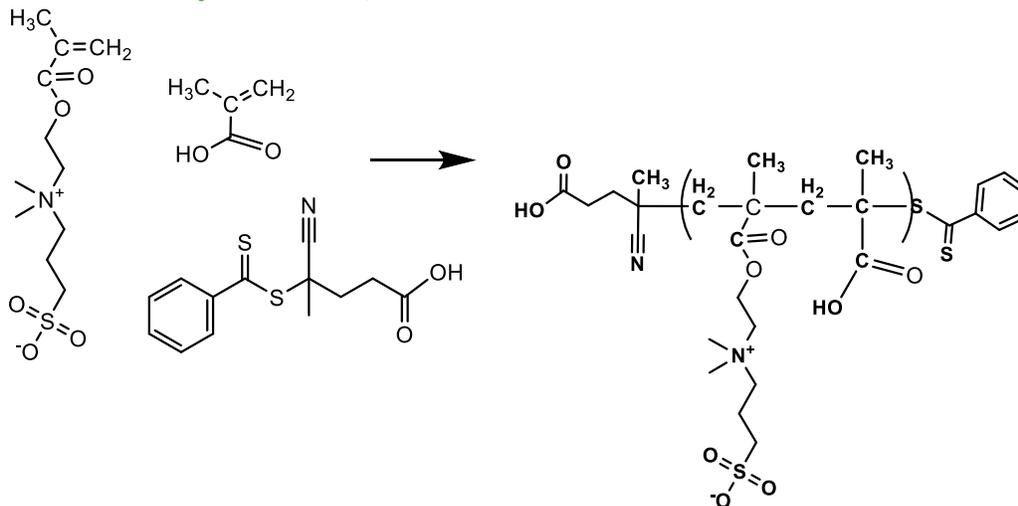
Product Chemical Architecture:



Composition:

Mn x 10 ³ (from HNMR)	Mw/Mn (PDI)	Composition DMAPS: MAA
12.0	1.6	55:45
Dp: DMAPS: MAA 28:25		

Method of Synthesis: By RAFT Process



Solubility in different solvents

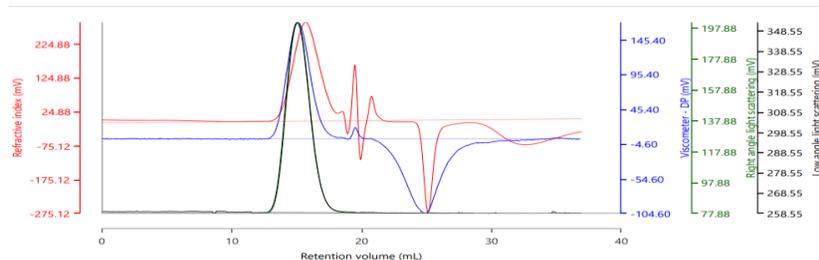
THF	X	DMSO	√
CHCl ₃	X	DMF	√
Water	√	Acetone	X

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; 1.8

B. NMR (HNMR) of polymer:

