

Product Profile

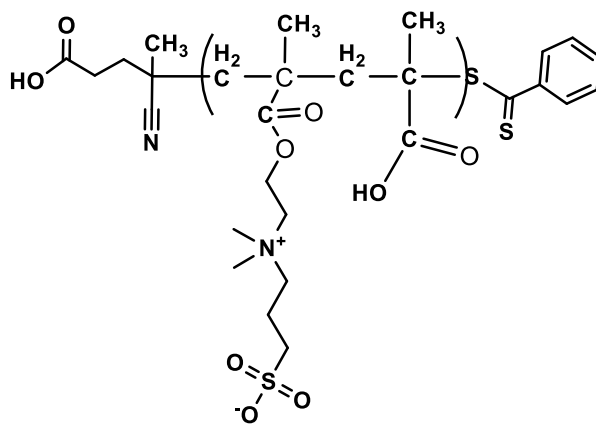
Identification

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

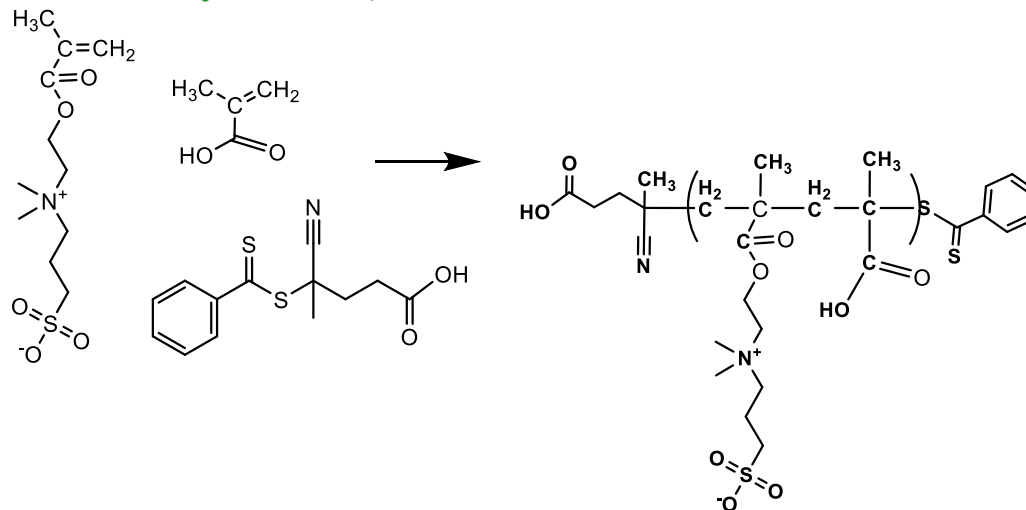
Product Chemical Architecture:



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

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

SEC chromatogram of poly(2-vinylpyridine) in THF. The x-axis is Retention volume (mL) from 0 to 40. The left y-axis is Refractive index (mV) from -275.12 to 224.88. The right y-axis is Viscosity (cP) from -104.60 to 145.40. Three traces are shown: a red trace (top), a blue trace (middle), and a black trace (bottom). The red trace shows a peak at ~16 mL and a shoulder at ~20 mL. The blue trace shows a peak at ~16 mL and a shoulder at ~20 mL. The black trace shows a peak at ~16 mL and a shoulder at ~20 mL. The right y-axis has a scale break between 145.40 and 197.88.

B. NMR (HNMR) of polymer:

