

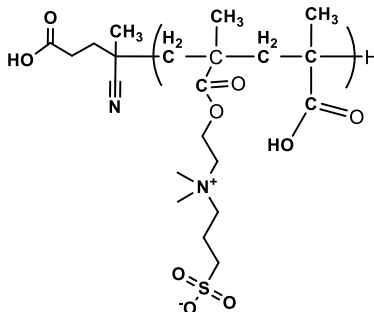
# Product Profile

## Identification

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

**Product Lot Number:** P45074-DMAPSMAAran

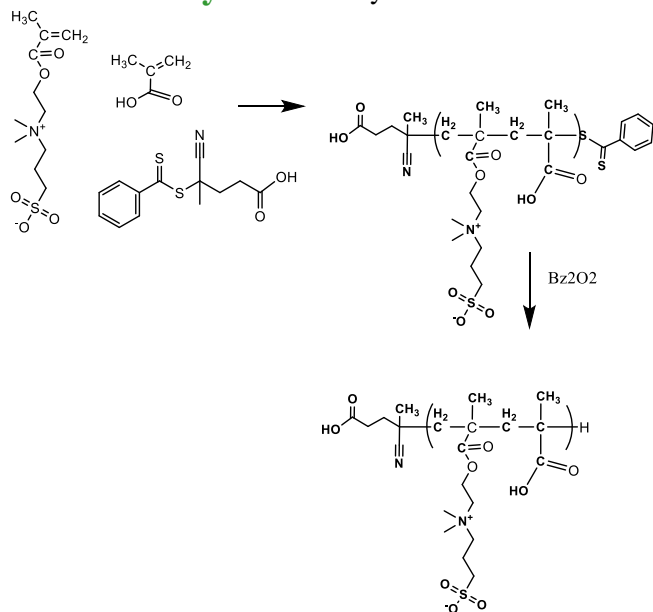
**Product Chemical Architecture:**



**Composition:**

Mn x 10 <sup>3</sup>	Mw/Mn (PDI)	Composition DMAPS:MAA
3.0	1.6	90:10
DP: DMAPS <sub>11</sub> -MAA <sub>1</sub>		

**Method of Synthesis:** By RAFT Process



**Solubility in different solvents**

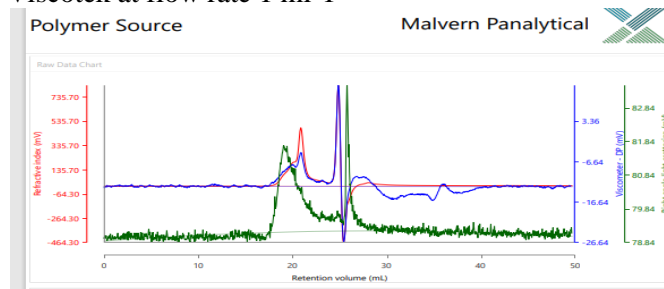
<b>THF</b>	<b>X</b>	<b>DMSO</b>	√
<b>CHCl<sub>3</sub></b>	<b>X</b>	<b>DMF</b>	√
<b>Water</b>	√	<b>Acetone</b>	<b>X</b>

**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:

