

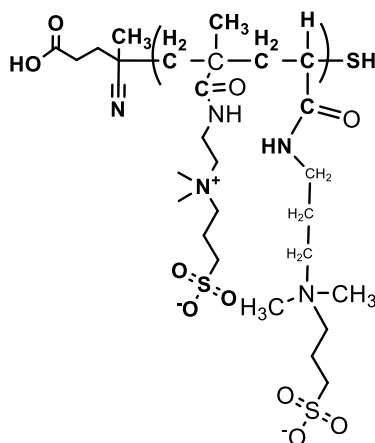
# Product Profile

## Identification

**Product Name:** Poly 3-[N-(3-Methacrylamido)propyl-N,N -dimethylammonio]-propanesulfonate-co-3-((3-Acrylamidopropyl)dimethylammonio)propane-1-sulfonate, random

**Product Lot Number:** P45098A-MAMDDMAPS-AMDDMPSran

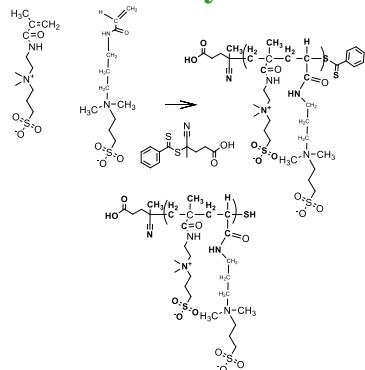
**Product Chemical Architecture:**



**Composition:**

Mn x 10 <sup>3</sup>	Mw/Mn (PDI)	Composition (molar)
3.5	1.13	6:4

**Method of Synthesis:** By RAFT Process



**Solubility in different solvents**

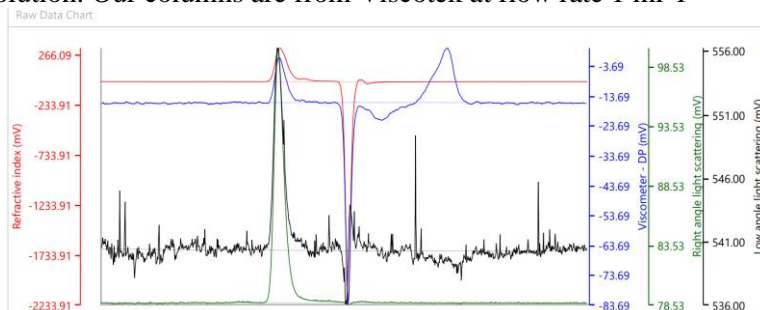
THF	X	DMSO	√
CHCl <sub>3</sub>	X	DMF	√
Water	√	Acetone	X

**Purification of Polymer:** By Soxhlet extraction of unreacted RAFT

## Validation of Architecture:

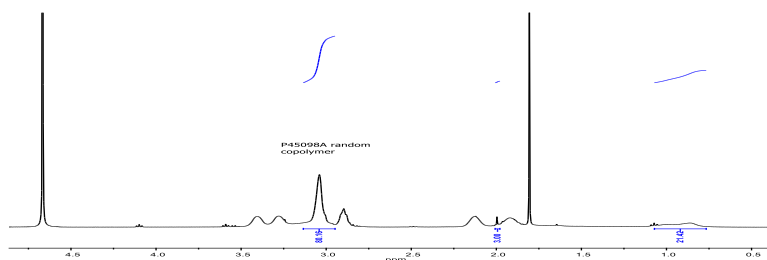
### A. Gel Permeation Chromatography (GPC), SEC- Profile

Sample of MAMDDMAPS: AMDDMPS 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 1.13

### B. NMR (HNMR) of polymer: RAFT protected



### C. NMR (HNMR) of polymer: after removing RAFT moiety;

