

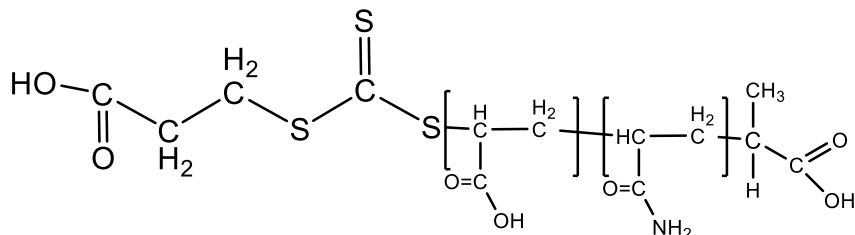
Product Profile

Identification

Product Name: Poly(acrylamide-co-acrylic acid), random

Sample #: P45663-AMDAAran

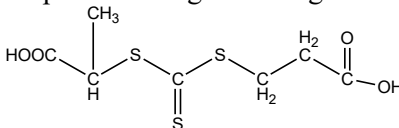
Structure:



Composition:

Mn x 10 ³	Mw/Mn (PDI)	PAA fraction by titratio
301.0	1.11	3.0%

Method of Synthesis: By RAFT process using following RAFT reagent



Solubility in different solvents

THF	×		
CHCl ₃	×	Acetone	×
Water	√		

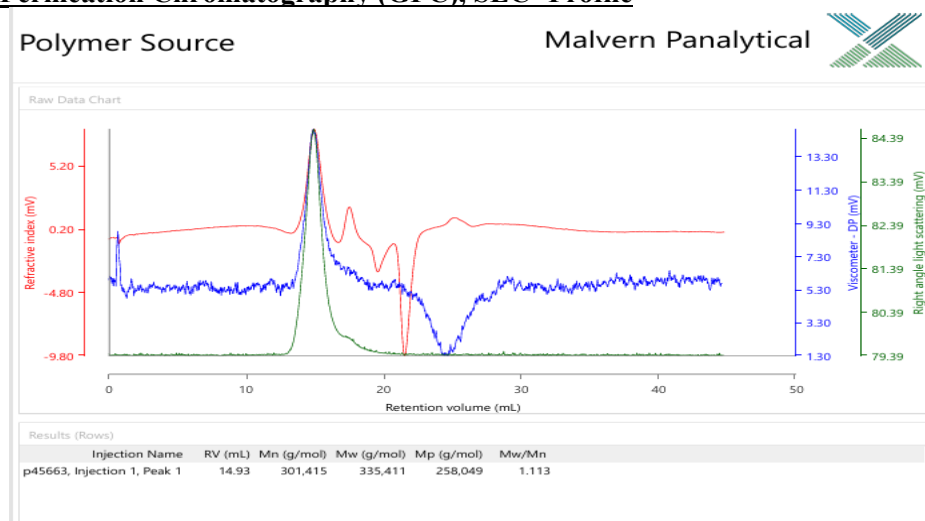
Purification of Polymer: By Soxhlet in acetone to remove unreacted monomer and traces amount of RAFT reagent

Validation of Architecture:

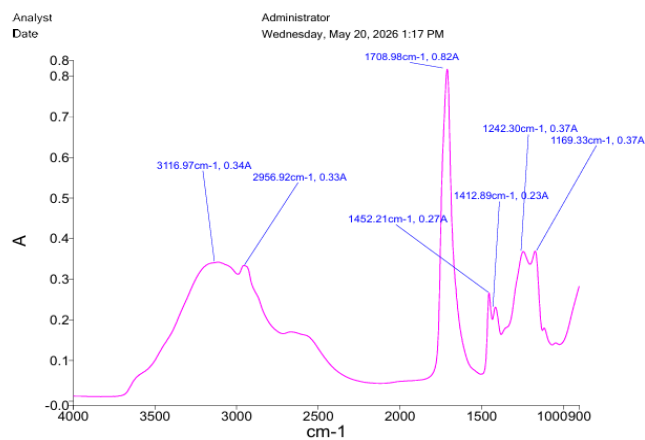
Eluent water compositions was Buffer NaHCO₃ 0.05M; NaNO₃ 0.1M; NaN₃: 0.03 wt % and Tri ethanol amine :0.02M Column : TSK 3300SWX 2 columns.

Conc: 2-3mg /ml of water. Higher concentration results in ambiguity in its analysis.

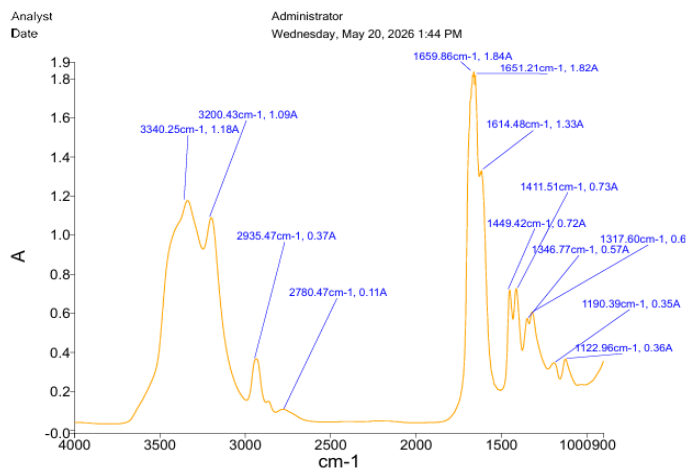
A. Gel Permeation Chromatography (GPC), SEC- Profile



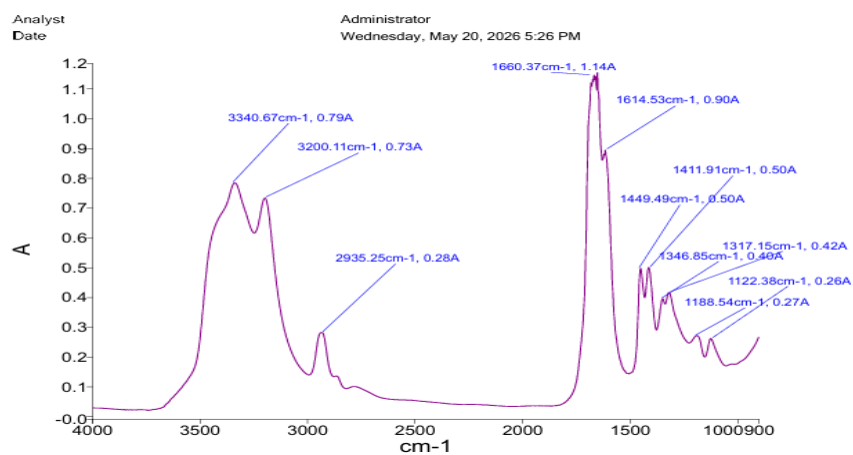
- **Poly(Acrylic acid) (P10680C-AA)**



- **Poly(Acrylamide) (P16221-AMD)**

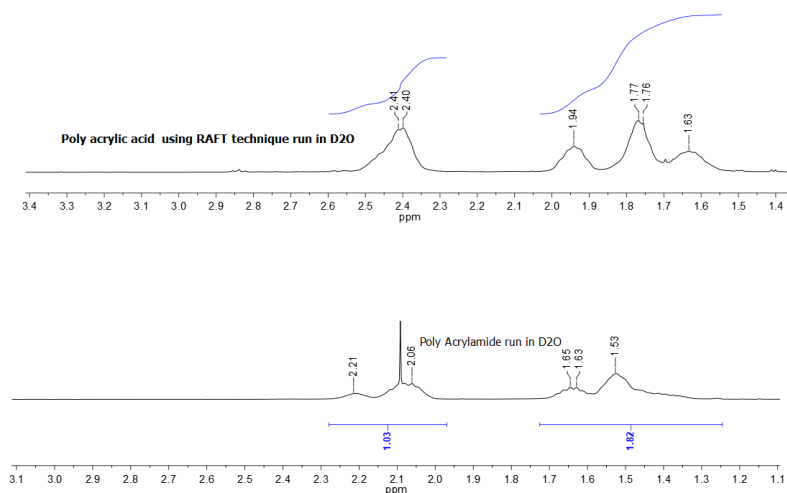


- **Poly(Acrylamide-ran-Acrylic acid) (P45663)**



B. NMR (HNMR) of polymer:

1. Poly acrylic acid and Poly acrylamide prepared using RAFT process run in D2O



2. AMDAAran run in D2O: Chemical shifts at 1.93 presence of AA fraction

