

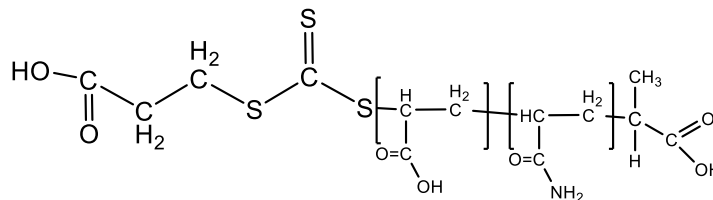
Product Profile

Identification

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

Sample #: P45663A-AMDAAran

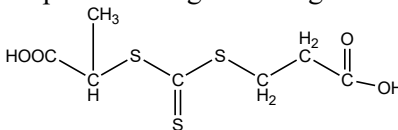
Structure:



Composition:

Mn x 10 ³	Mw/Mn (PDI)	PAA fraction by titration
184	1.05	4.3%

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:

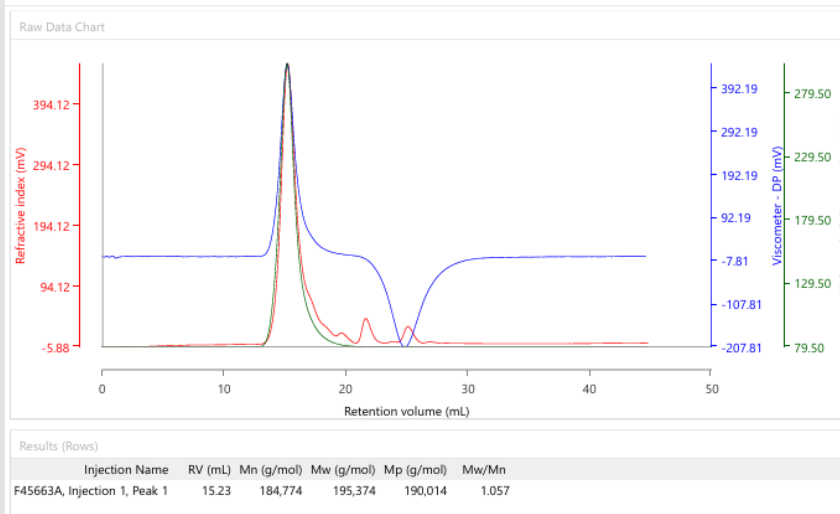
Eluent water compositions was Buffer NaHCO₃ 0.05M; NaNO₃ 0.1M; NaN₃: 0.03 wt % and Tri ethanol amine :0.02M Column : TSK 3300SWX 2 columns.

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

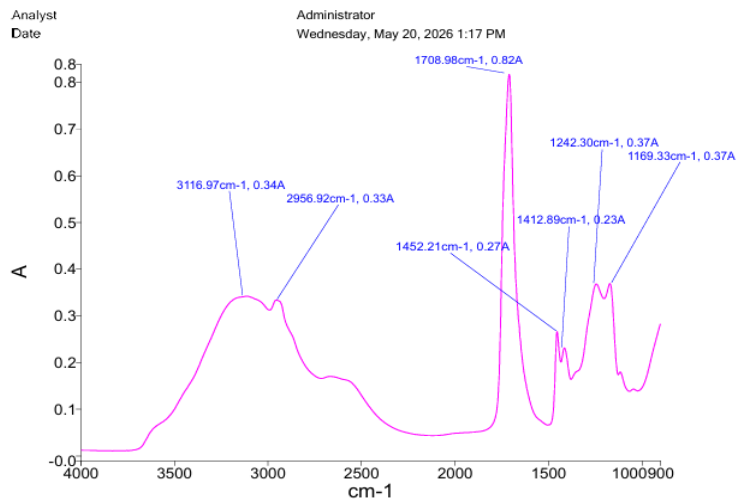
A. Gel Permeation Chromatography (GPC), SEC- Profile

Polymer Source

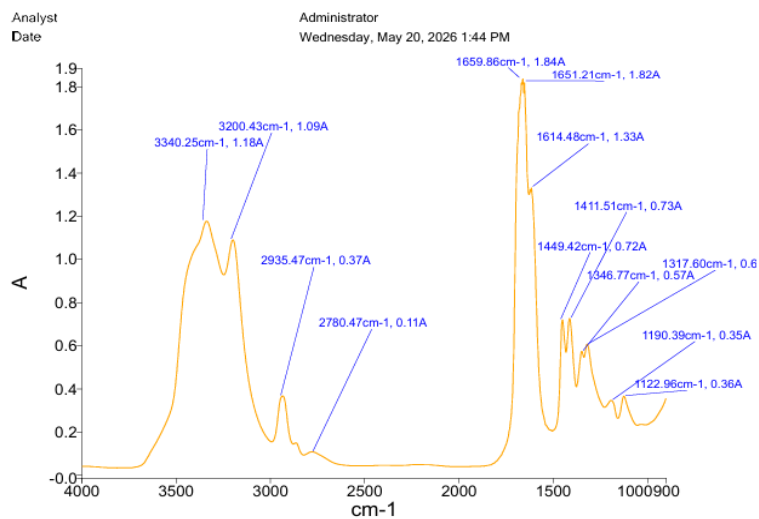
Malvern Panalytical



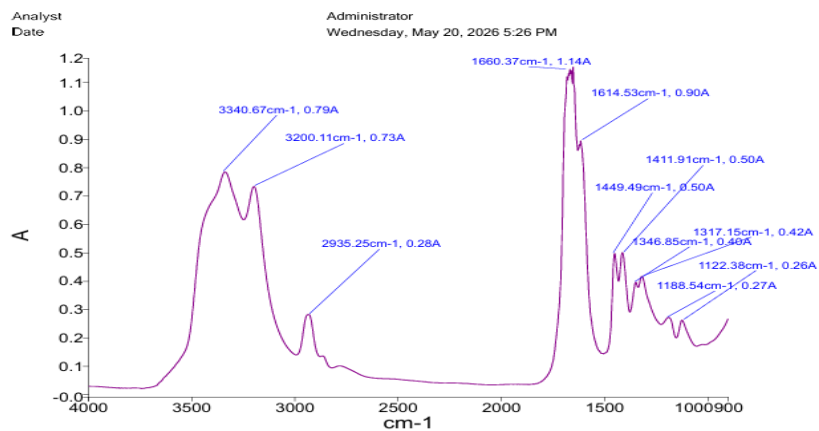
- Poly(Acrylic acid) (P10680C-AA)



- Poly(Acrylamide) (P16221-AMD)

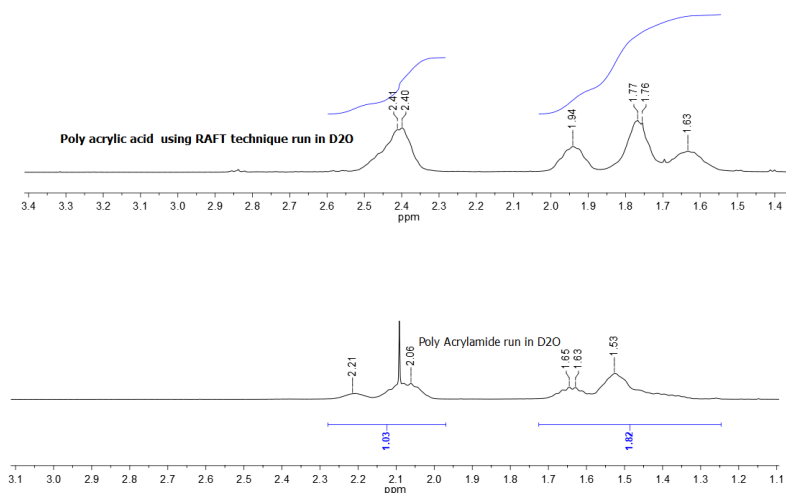


- Poly(Acrylamide-ran-Acrylic acid) (P45663A)



B. NMR (HNMR) of polymer:

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



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

