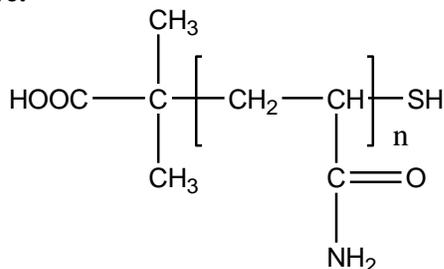


Sample Name: Poly(acrylamide)

Sample #: P20261A-AMD

Structure:

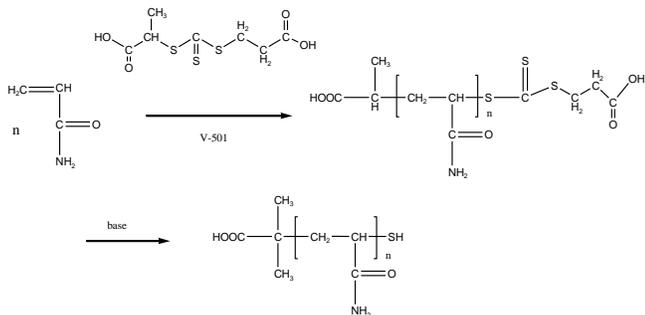


Composition:

$M_n \times 10^3$	Mw/Mn (PDI)
149.0	1.57

Synthesis Procedure:

Poly(acrylamide) was synthesized by RAFT polymerization of acrylamide using 4,4'-azo(4-cyanopentanoic acid) as initiator and trithiocarbonate as chain transfer agent in water. The reaction scheme is shown below:



Characterization:

Polyacrylamide was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight polydispersity index (PDI) using water containing 0.1MNaNO₃ as eluent.

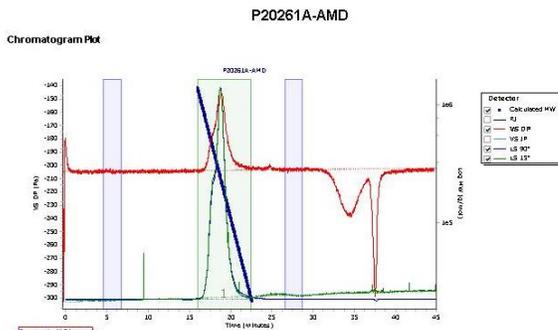
The molecular weight can be calculated by intrinsic viscosity and by SEC the distribution of the polymer calculated using PEG standards polymers. [Ref.: Suresh K. Jewrajka, and Broja M. Mandal, *Macromolecules*, 2003, 36 (2), 311-317]

Solubility:

The polymer is soluble only in water.

SEC elugram of the polymer:

Agilent GPC/SEC Software



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz-1 (g/mol)	Mv (g/mol)	PDI
Peak: 1	231016	149131	228227	295800	359416	279362	1.53

Processing Parameters

Method: Last modified by GPC Agilent at 10:33:31 AM on August 29, 2018

Concentration Detector Used in: RI

Analysis:

Injection volume (μL): 100.00

Flow rate (mL/min): 1.00

Concentration options: Calculate Sample Concentration from Entered Sample Properties

Entered dn/dc (mL/g): 0.180

Entered Ext Coeff ((mg/mL)⁻¹cm⁻¹): 1.000

Calculated RI concentration (mg/mL): 0.534