Sample Name: Poly(acrylamide)

Sample #: P16211-AMD

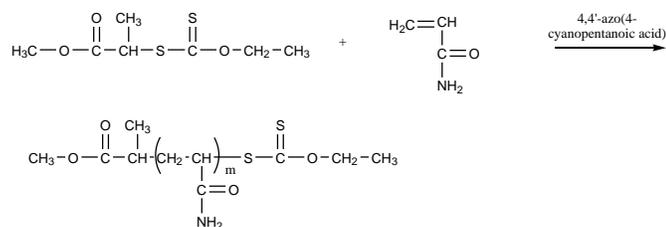**Structure:**
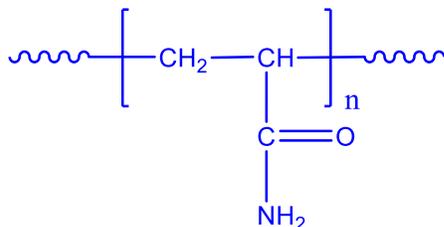
Composition:

Mn × 10³	Mw/Mn (PDI)
20.0	1.8

Synthesis Procedure:
Poly(acrylamide) is synthesized by RAFT polymerization of acrylamide using 4,4'-azo(4-cyanopentanoic acid) as initiator and xanthate as chain transfer agent in the mixture of water/isopropanol.

Characterization:
Polyacrylamide was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI) using water containing 0.1M NaNO$_3$ as an eluent and PEG as a standard.
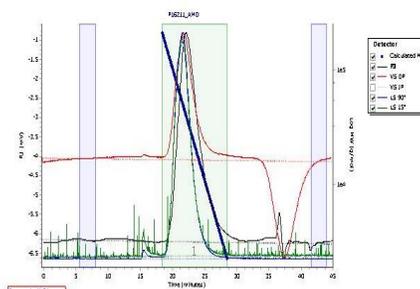
Solubility:
The polymer is soluble in water.

SEC elugram of the polymer:

Agilent GPC/SEC Software

P16211_AMD

Chromatogram Plot

Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PDI
Peak 1	40565	20032	36830	53058	67412	49874	1.839

Processing Parameters

Method	Last modified by GPC Agilent at 10:33:31 AM on August 29, 2018
Concentration Detector Used in Analysis	RI
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)-¹][cm-¹])	1.000
Calculated RI concentration	3.809