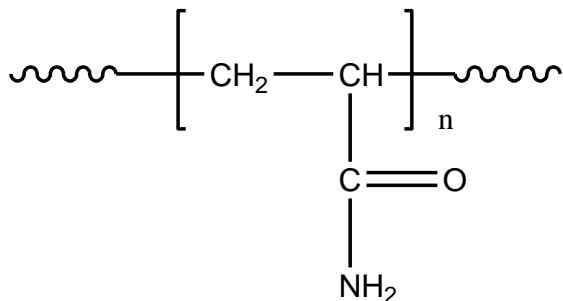


Sample Name: Poly (Acrylamide)

Sample #: P41550-AMD

**Structure:**



**Composition:**

Mn $\times 10^3$	Mw/Mn (PDI)
2,095.0	1.23
T <sub>g</sub> (°C)	184

**Synthesis Procedure:**

Poly (Acrylamide) was synthesized by controlled radical polymerization process.

**Characterization:**

The polymer was characterized by size exclusion chromatography (SEC) using State-of-the-art Agilent Technologies 1260 Infinity II GPC system Equipped with triple detector:

**Solvent (mobile phase)** 2% acetic acid in Millipore water

**Filtration:** 0.45  $\mu$ Nylon Syringe Filter

**Columns:** Agilent three columns

**Flow Rate:** 1 ml/min

**Injection Volume:** 100  $\mu$ L

**Column Temperature:** 30 °C

**Calibration of Instrument using PEO polymer.**

**Note:** Polyacrylamide bearing Mw > 1M are difficult to filter therefore this equipment is highly sensitive where less than 1mg/ml polymer solution can be detected by triple detector.

**Solubility:**

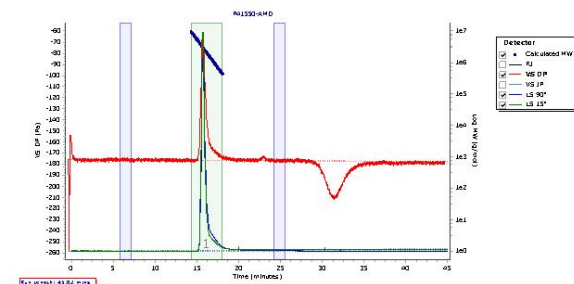
Polymer is soluble in water.

## SEC Profile of the Polymer

Agilent GPC/SEC Software

P41550-AMD

Chromatogram Plot



Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mo (g/mol)	PDI
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Peak 1	3038182	2095307	2579552	2860893	3029600	2845442	1.231
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Processing Parameters

Method: Last modified by GPC Agilent at 10:33:31 AM on August 29, 2018  
Concentration Detector Used in: RI  
Analysis: 100.00  
Injection volume ( $\mu$ L): 1.00  
Flow rate (mL/min): Calculate Sample Concentration from Entered Sample Properties  
Entered divldc (mL/g): 0.180  
Entered Ext Coeff ((mg/mL) $^{-1}$ cm $^{-1}$ ): 1.000  
Calculated RI concentration (mg/mL): 0.079