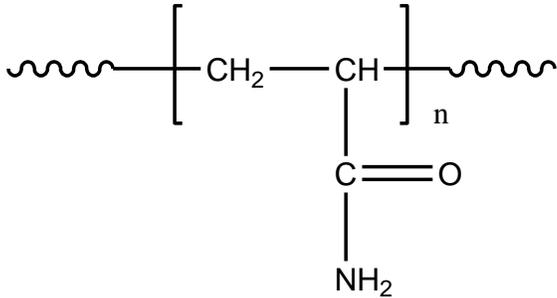


**Sample Name: Poly (Acrylamide)**

**Sample #: P41550G-AMD**

**Structure:**



**Composition:**

Mn $\times 10^3$	Mw/Mn (PDI)
5,340.0	1.17
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

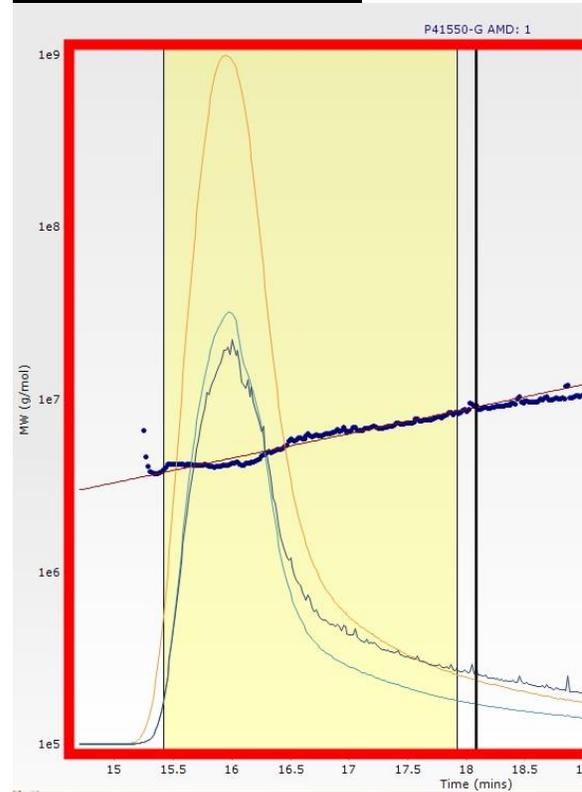
**Calibration of Instrument using PEO polymer.**

**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:**



MW Extrapolated Fit Calculated Statistics (g/mol)			
MW	6270318	Mn	5340884
Mp	4517988	Mz	8339528
Mz+1	11996341	Mv	0
PD	1.174		

Structural Statistics (Rg)			
Rgw	112.33	Rgn	109.14
Rgp	105.91	Rgz	118.23
Rgz+1	126.21		