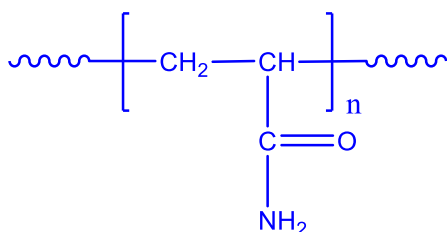


Sample Name: Poly(acrylamide)

Sample #: P6710A-AMD

Structure:

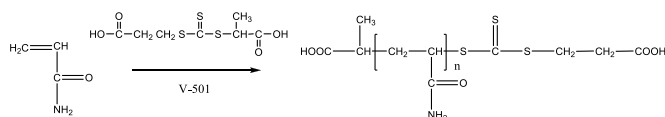


Composition:

$M_n \times 10^3$	Mw/Mn (PDI)
7.0	1.02

Synthesis Procedure:

Poly(acrylamide) is 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 and analyzed by size exclusion chromatography (SEC) to obtain the molecular weight polydispersity index (PDI) using water containing 0.2M NaNO₃ and 0.01M NaH₂PO₄ as eluent. The molecular weigh 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 water soluble only.

SEC elugram of the polymer:

Agilent GPC/SEC Software

