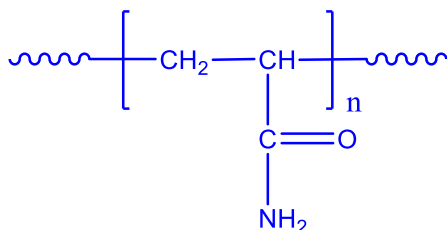


Sample Name: Poly(acrylamide)

Sample #: P20264A-AMD

Structure:

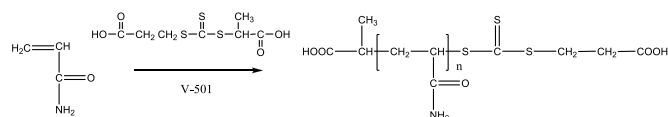


Composition:

$M_n \times 10^3$	Mw/Mn (PDI)
155.0	1.24

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 was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI) using water containing 0.2M NaNO_3 and 0.01M NaH_2PO_4 as an eluent and PEG as a standard. The molecular weight can be calculated by intrinsic viscosity. [Ref.: Suresh K. Jewrajka, and Broja M. Mandal, *Macromolecules*, 2003, 36 (2), 311-317].

Solubility:

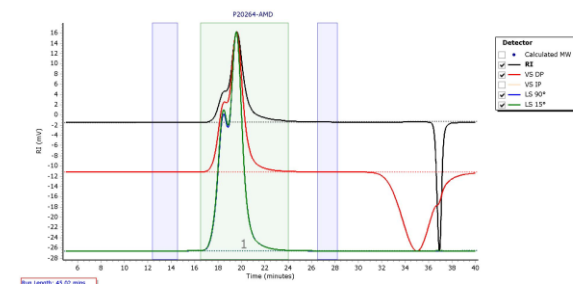
The polymer is soluble only in water.

SEC of the polymer:

Agilent GPC/SEC Software

P20264-AMD

Chromatogram Plot



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	178348	155672	194242	227673	261277	222010	1.248