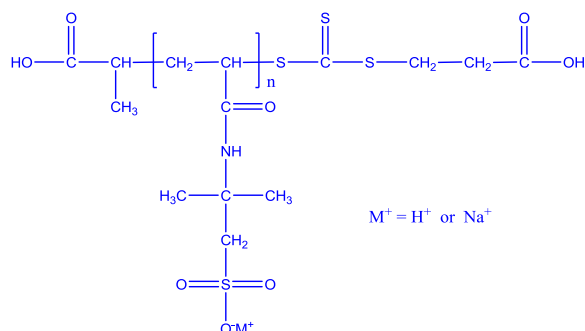


Sample Name: Poly(2-acrylamido-2-methylpropanesulfonic acid) sodium salt

Sample #: P6726-AMPSNa

Structure:

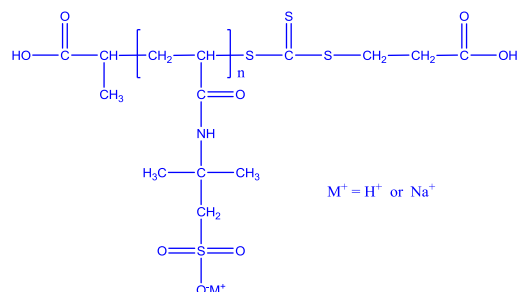
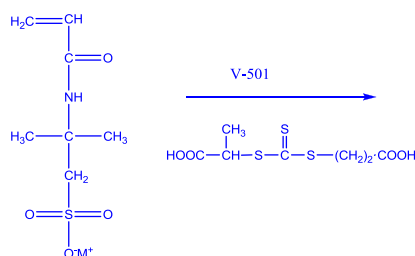


Composition:

| $M_n \times 10^3$ | Mw/Mn (PDI) |
|-------------------|-------------|
| 20.4 | 1.30 |

Synthesis Procedure:

Poly(2-acrylamido-2-methylpropanesulfonic acid) is synthesized by RAFT polymerization of acrylamido-sulfonic acid monomer using 4,4'-azo(4-cyanopentanoic acid) as initiator and trithiocarbonate as chain transfer agent in water. The reaction scheme is shown below:



Characterization:

Poly(2-acrylamido-2-methylpropanesulfonic acid) was 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 weight and its distribution can be calculated by SEC based on PEG standards calibration.

Solubility:

The polymer is soluble in water.

SEC of Sample of the polymer:

