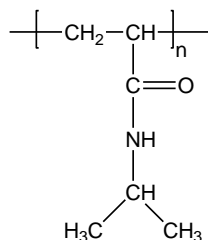


Sample Name: Poly(N-isopropyl acrylamide)

Sample #: P3251-NIPAM

Structure:

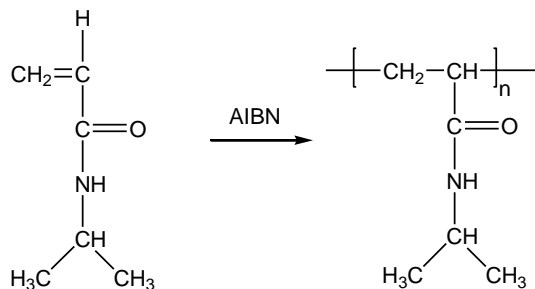


Composition:

Mv x 10 ³	PDI
29.2	1.96

Synthesis Procedure:

Poly(N-isopropyl acrylamide) is obtained by free radical polymerization. The scheme of the polymerization is illustrated below:



Characterization:

The molecular weight polydispersity index (PDI) of poly(N-isopropyl acrylamide) is obtained by size exclusion chromatography. Molecular weight is calculated based on intrinsic viscosity in Methanol at 25 °C:

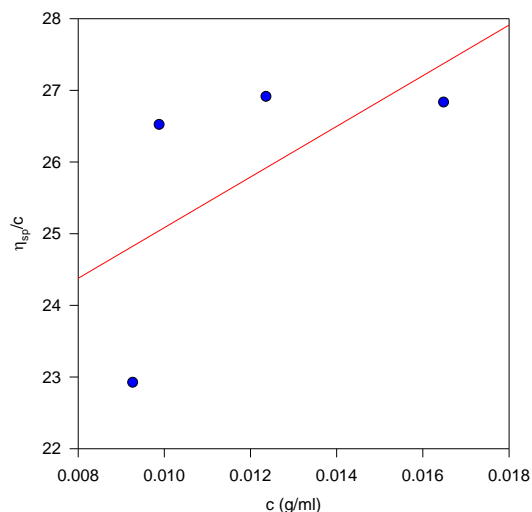
$$[\eta] = 0.0299 \times \text{Mv}^{0.64}$$

Solubility:

Poly(N-isopropyl acrylamide) is soluble in water, DMF, THF, acetone, insoluble in hexane and ether.

SEC of Homopolymer:

P3251-NIPAM



Intrinsic Viscosity measurement of Poly(N-isopropyl acrylamide) in Methanol at 25°C
[η]=21.552
Viscosity Average Molecular Weight Mv=29,200