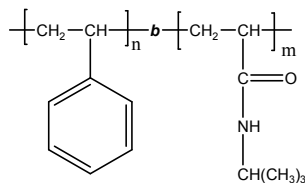


Sample Name:
Poly(styrene-b-N-isopropyl acrylamide)

Sample #: P14507A-SNIPAM

Structure:



Composition:

Mn x 10 ³ S-b-NIPAM	Mw/Mn (PDI)
17.1-b-37.1	1.68

Synthesis Procedure:

Poly(styrene-b-N-isopropyl acrylamide) is prepared by RAFT polymerization in 1,4-dioxane.

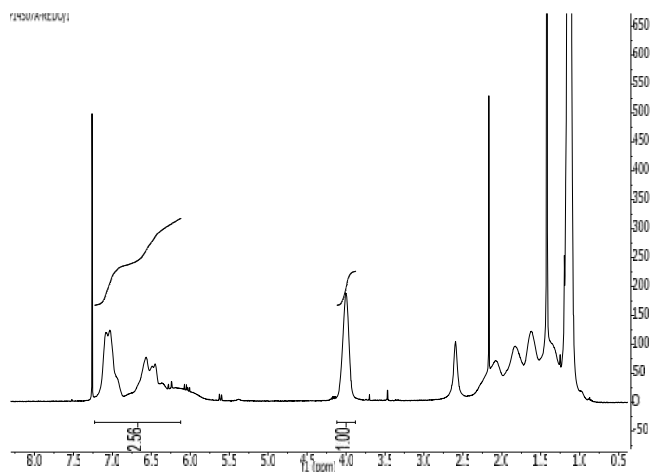
Characterization:

The final block copolymer composition was calculated from ¹H-NMR spectroscopy by comparing the peak area of the aromatic protons on styrene between about 6.2-7.2 ppm with the proton of NCH on NIPAM at 4.0 ppm. The PDI of block copolymer is determined by SEC.

Solubility:

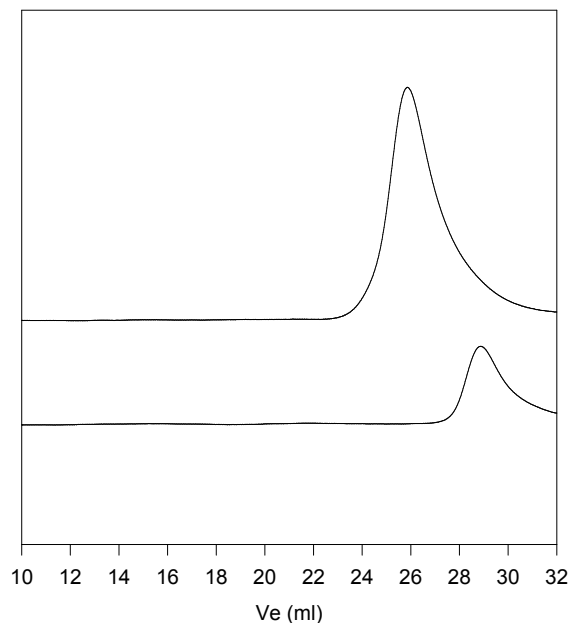
Poly(styrene-b-N-isopropyl acrylamide) block copolymer is soluble in CHCl₃, DMF.

¹H NMR spectrum of the diblock copolymer



SEC of the diblock copolymer

P14507A-SNIPAM



Size exclusion chromatography of polystyrene-b-N-isopropylacrylamide)

— Polystyrene, M_n=17,100, M_w=24,200, PDI=1.42

— Block Copolymer PS(17,100)-b-NIPAM(37,100), PDI=1.68