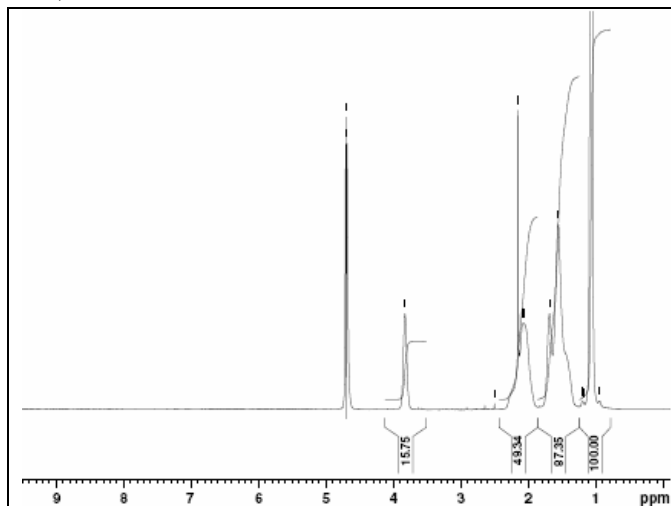


No. AO-16

Certificate of Analysis

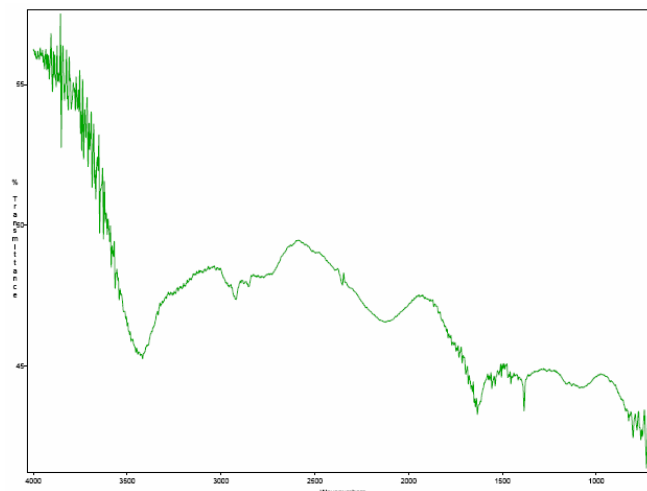
Product Name: Poly(n-isopropylacrylamide-co-acrylamide) copolymer (50:50)

H-NMR



H-NMR Spectrum of P(nipam-AM) copolymer in D₂O
(Varian Inova 300 MHz instrument)

FTIR



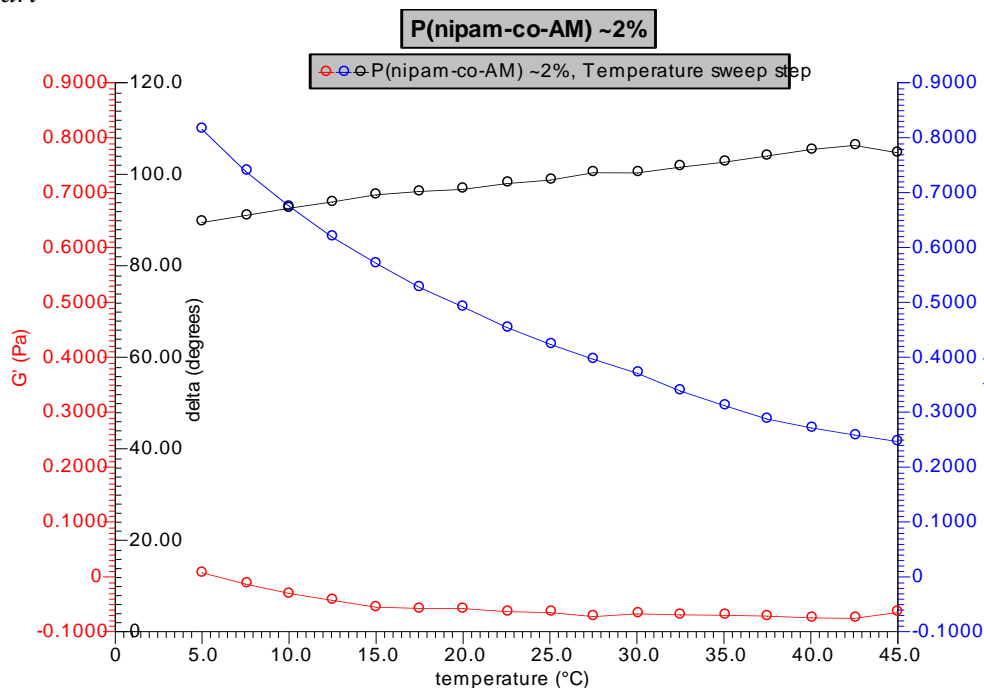
FTIR Analysis: Collected from a KBR pellet placed in Satellite FTIR (Thermo-Mattson) and analyzed in transmission mode.

• Rheology

Rheology performed on AR550 (TA instruments) with 60mm 2degree cone on ~2% w/v polymer in water dissolved overnight with stirring at 4C. Viscosity of solution at 0.1 (sec-1) and 5C was measured (1minute peak hold 5 second test intervals).

Rheology performed by oscillating at constant 6.283 rad/s, 0.1% strain, in increments of 2.5C ranging from 5-45C with 3 minutes of temperature equilibration at each point.

Rheology Chart



Viscosity ~2% w/v solution at 5C

0.4587 Pa.s