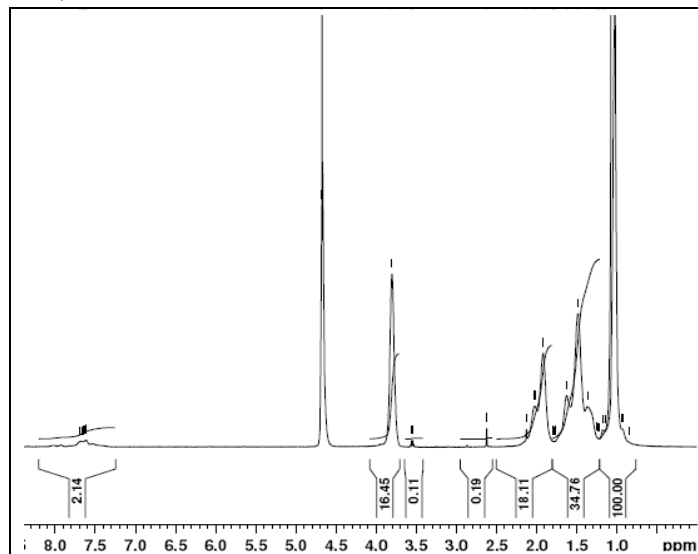


No. AO-14

# Certificate of Analysis

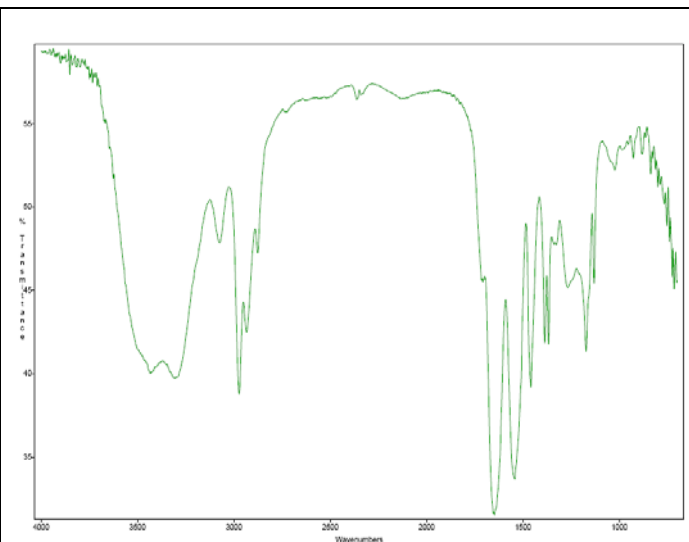
Product Name: Poly(n-isopropylacrylamide-co-acrylic acid) (95:5)

## H-NMR



H-NMR Spectrum of P(Nipam-AA) copolymer in D<sub>2</sub>O  
(Varian Inova 300 MHz instrument)

## FTIR

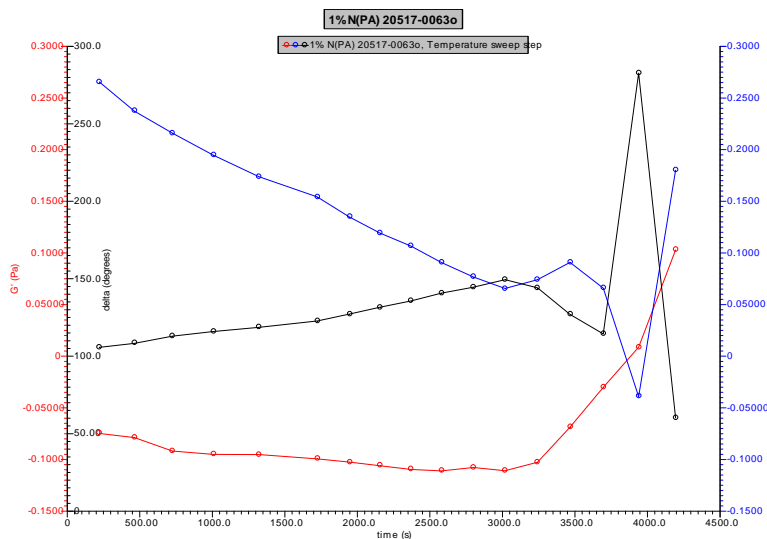


FTIR Analysis: Collected from cast-film on KBR salt-plate placed in Satellite FTIR (Thermo-Mattson) and analyzed in transmission mode.

## Rheology

Rheology performed on AR550 (TA instruments) with 60mm 2degree cone on 1% 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 1% w/v solution at 5C

0.07059 Pa.s