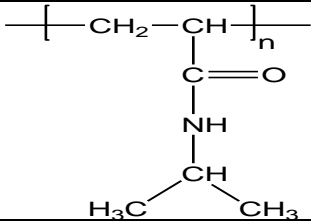


Product Profile

Identification

Product Name: Poly(N-isopropylacrylamide)	CAS: 25189-55-3
Abbreviation: PNIPAM	Lot: P3271-R-NIPAM
Formula: CH ₃ (C ₆ H ₁₁ NO) _n CH ₃	
Product Chemical Architecture:	

Composition:

Mn (g/mole)	43,000
Mw (g/mole)	59,000
Mw/Mn	1.38
dn/dc (mL/g)	0.077

Method of Synthesis

The polymer is prepared by Raft Polymerization.

Solubility in different solvents

THF	√	DMF	√
Alcohol	√	CHCl ₃	√
Toluene	X	Water (LCST 32°C)	Depending on its LCST

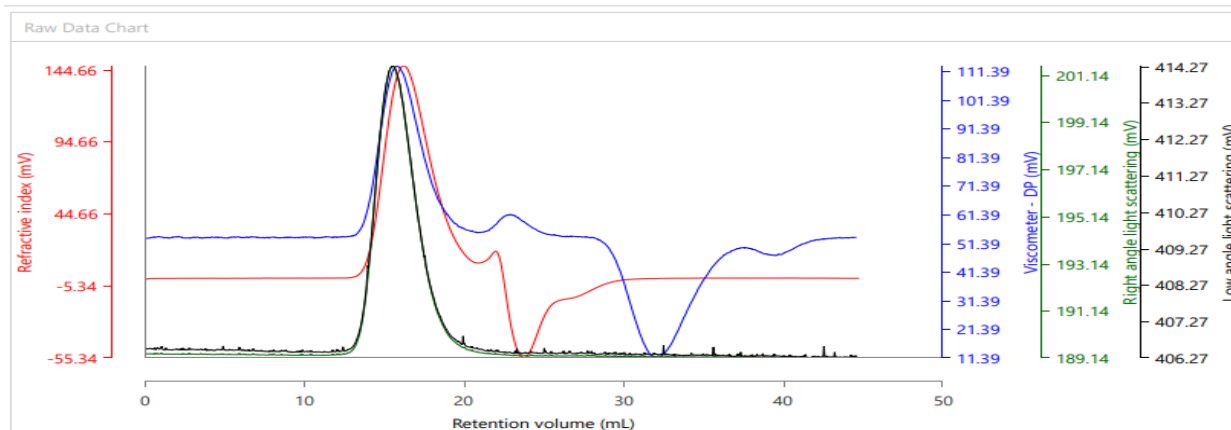
Validation of Architecture

A. Gel Permeation Chromatography (GPC), SEC- Profile:

GPC – Malvern Omnisec Triple Detection ,2 Viscotek Mixed 300 x 8.0 mm columns at 35°C, flow 0.7mL/min. Mobile phase (MP): DMF + 0,023M LiBr

Polymer Source

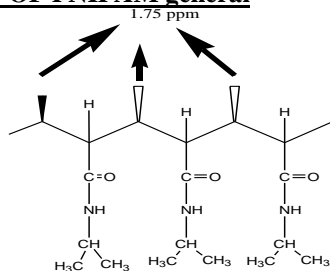
Malvern Panalytical



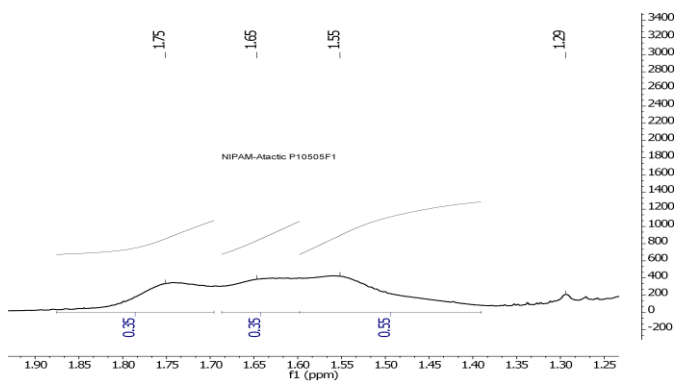
Results (Rows)

Injection Name	RV (mL)	Mn (g/mol)	Mw (g/mol)	Mp (g/mol)	Mz (g/mol)	Mw/Mn
P3271, Injection 1, Peak 1	16.22	42,857	59,309	59,075	80,806	1.384

B. NMR (HNMR) OF PNIPAM general



An example of hetero (rmmr) triads



C. Dependence of glass transition temperature (T_g) of PNIPAM from its molecular weight:

