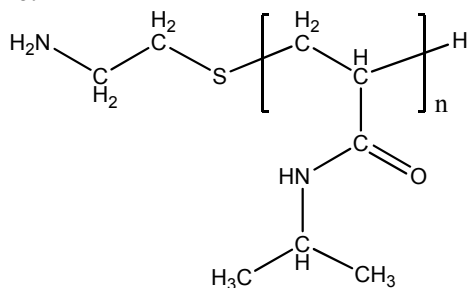


Sample Name:

**Amino-terminated poly(N-isopropyl acrylamide)**

Sample # **P20150A-NIPAMNH2**

**Structure:**

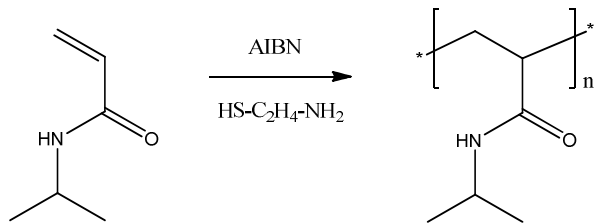


**Composition:**

$M_n \times 10^3$ (g/mol)	$M_w/M_n$
166.0	1.8
Syndio: Hetero+iso contents	

**Synthesis Procedure:**

Amino-terminated poly(N-isopropyl acrylamide) was prepared by free-radical polymerization of N-isopropyl acrylamide in presence of an amino-group containing chain-transfer agent. The product was purified by fractionation. The scheme of reaction is shown below:



**Characterization:**

The molecular weight and functionality degree of the polymer were calculated by titration using  $\text{HClO}_4$ /Crystal violet in  $\text{CHCl}_3$ /acetic acid. The polydispersity index ( $M_w/M_n$ ) was determined by size exclusion chromatography (SEC) on a Varian liquid chromatograph equipped with a triple detector.

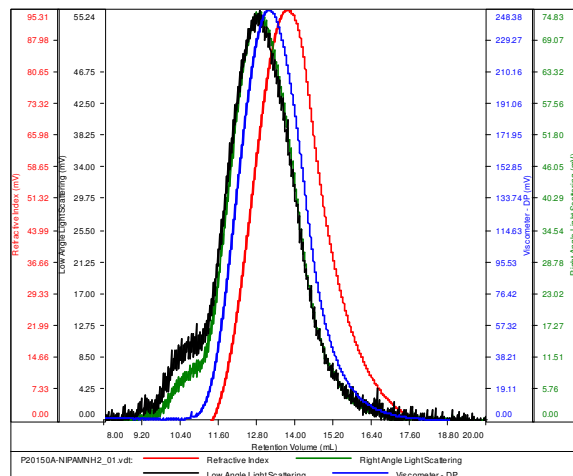
**Solubility:**

The polymer is soluble in water, THF, chloroform and dichloromethane; and is insoluble in hexane and ether.

**SEC elugram of the polymer:**

SAMPLE ID: P20150A-NPAM-NH2

Conc (mg/mL)	9.2726
dn/dc (mL/g)	0.0770
Method	PS80K-17SEP2014-0000.vcm
Solvent	DMF w 0.03MLiBr
Column	PSS



Sample	$M_n$	$M_w$	$M_p$	$M_w/M_n$	IV
P20150A-NIPAMNH2_01.vdt	165,292	301,207	224,991	1.822	0.6922