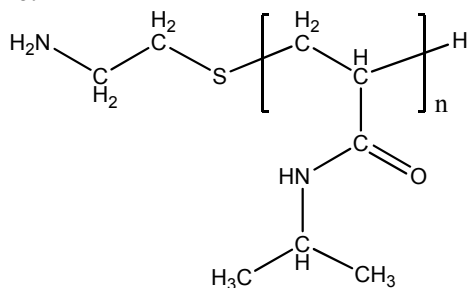


Sample Name:

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

Sample # **P18035-NIPAMNH2**

**Structure:**

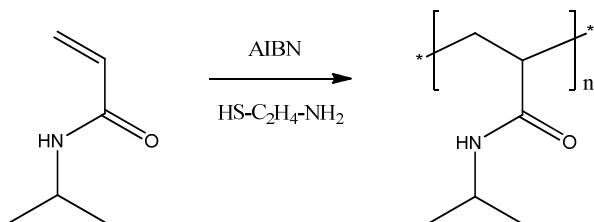


**Composition:**

$M_n \times 10^3$ (g/mol)	$M_w/M_n$
43.0	1.6
Syndio : Hetero+iso contents	66:34

**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:



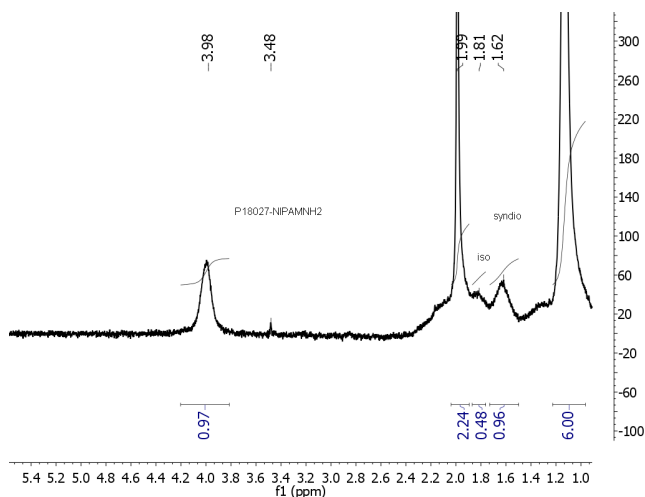
**Characterization:**

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. The tacticity of the polymer was calculated from  $^1\text{H}$  NMR analysis.

**Solubility:**

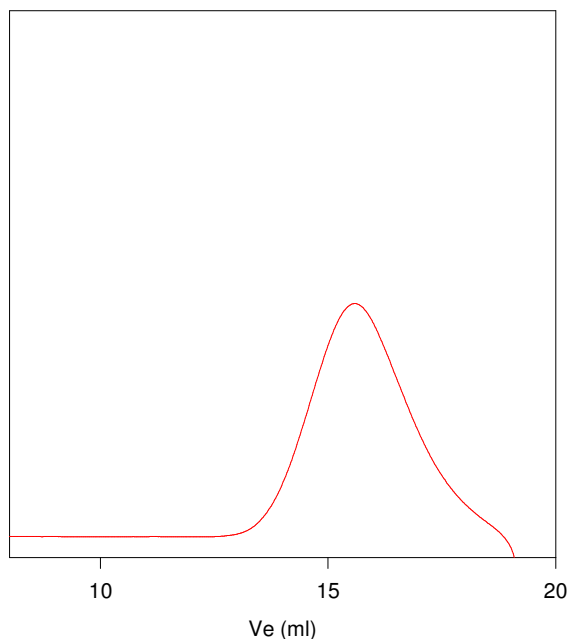
The polymer is soluble in water, THF, chloroform and dichloromethane; and is insoluble in hexane and ether.

**$^1\text{H}$  NMR spectrum of the polymer:**



**SEC elugram of the polymer:**

**P18035-NIPAMNH2**



Size exclusion chromatography of poly(N-isopropylacrylamide) with respect to polystyrene standards:  
Eluent: DMF  
 $M_w/M_n=1.6$ ,  $M_n$  by titration: 43,000