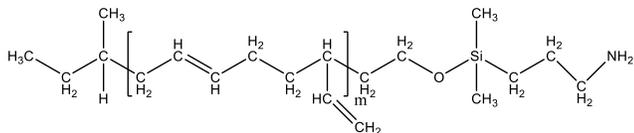


**Sample Name: Poly(1,2-butadiene), ω-amino terminated**

**Sample #: P19468-BdNH2**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
1.8	1.10

Functionality:>80%
T <sub>g</sub> : -31°C

**Synthesis Procedure:**

The polymer was synthesized by anionic polymerization process.

**Characterization:**

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

**Functionality:** The functionality of polymer was determined by the titration with HClO<sub>4</sub> using crystal violet as the indicator

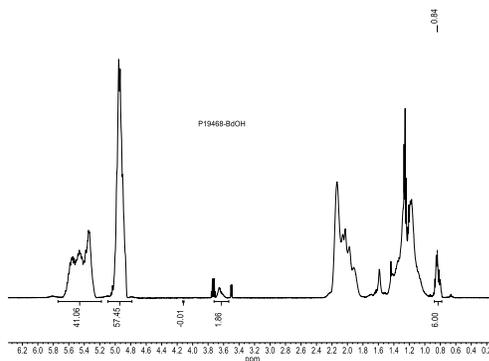
**Thermal Analysis:**

Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T<sub>g</sub>) of the sample has been considered.

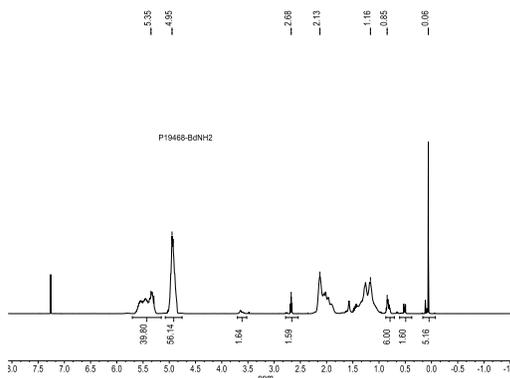
**Solubility:**

Amino terminated polybutadiene is soluble in THF, toluene, hexane, cyclohexane and CHCl<sub>3</sub>. It precipitates from cold methanol, and ethanol.

**HNMR spectrum of BdOH sample:**

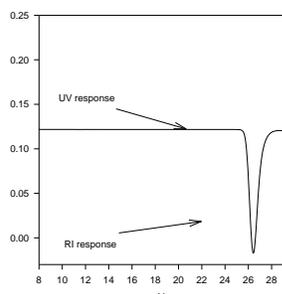


**HNMR spectrum of the Polymer:**



**SEC profile of the Polymer:**

P19468-BdNH2 (1, 2 addition)



Size Exclusion Chromatography :  
 M<sub>n</sub>: 1800 M<sub>w</sub>: 1900 Mw/Mn 1.10 Functionality: > 80%  
 — UV response at 290nm after end capping NH2 group with 1-Naphthyl isocyanate

**DSC thermogram for the sample:**

