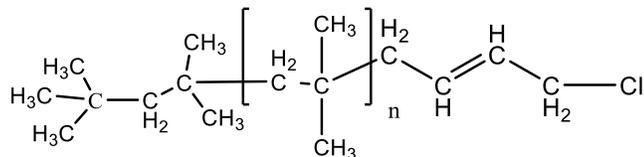


**Sample Name:**  
**Chloro Butene Terminated Polyisobutylene**

**Sample #:** P42314-IB-BCI

**Structure:**

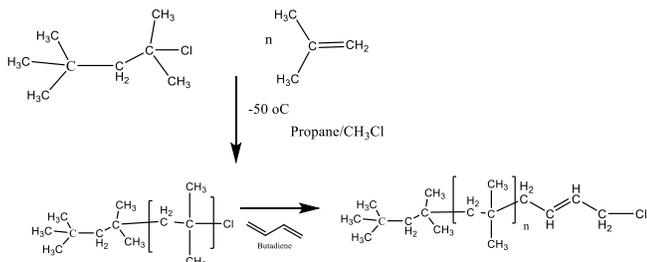


**Composition:**

Mn x 10 <sup>3</sup>	PDI
6.5	1.02
functionality	>95%

**Synthesis Procedure:**

Vinyl (olefinic) terminated polyisobutylene was prepared by cationic living polymerization of isobutylene. The polymerization reaction was terminated with 1,3 butadiene. The scheme of the reaction is illustrated below:



**Characterization:**

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

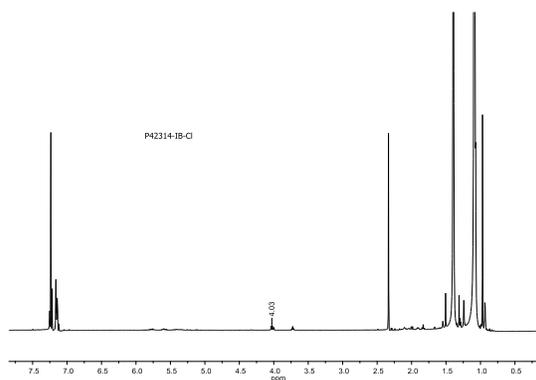
**Functionality:**

The polymer's functionality was determined by <sup>1</sup>H-NMR spectroscopy.

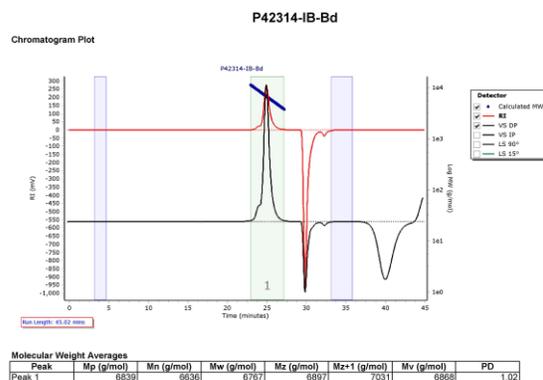
**Solubility:**

The polymer is soluble in THF, CHCl<sub>3</sub>, toluene and hexane.

**<sup>1</sup>H-NMR spectrum of the sample:**



**SEC chromatograms:**



**Effect of Solvents system on the cationic process of IB polymerization:**

