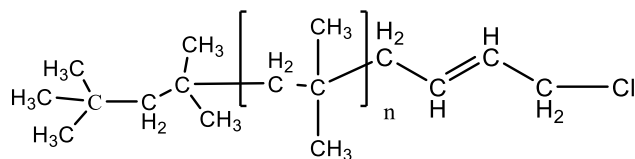


Sample Name:
Chloro Butene Terminated Polyisobutylene

Sample #: P42318-IB-BCI

Structure:

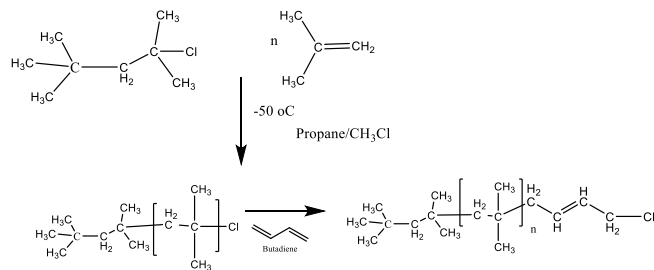


Composition:

Mn x 10 ³	PDI	Functionality
5.5	1.22	>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.

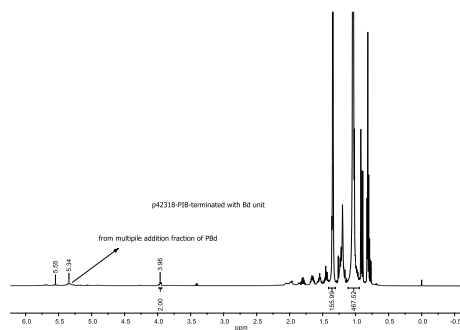
Functionality:

The polymer's functionality was determined by ¹H-NMR spectroscopy.

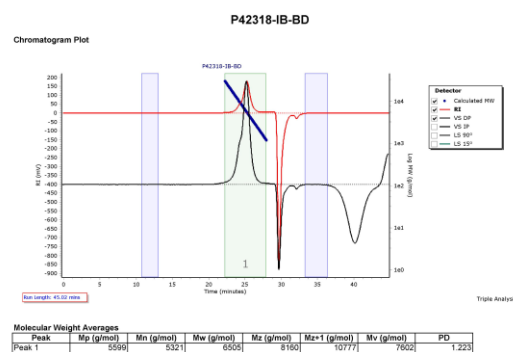
Solubility:

The polymer is soluble in THF, CHCl₃, toluene and hexane.

¹H-NMR spectrum of the sample:



SEC elugram of Sample:



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

