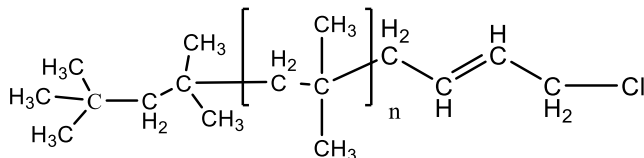


Sample Name:
Chloro Butene Terminated Polyisobutylene

Sample #: P42314-IB-BCI

Structure:

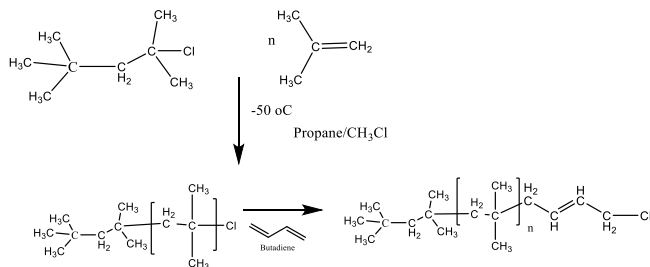


Composition:

$M_n \times 10^3$	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.

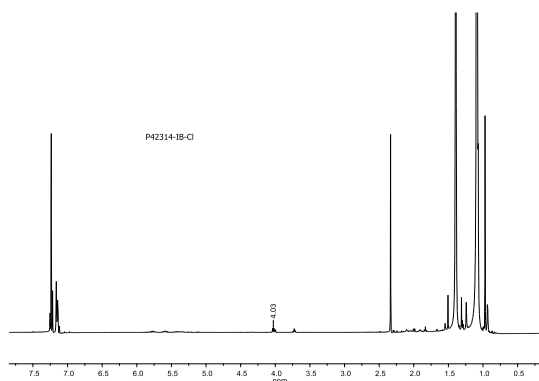
Functionality:

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

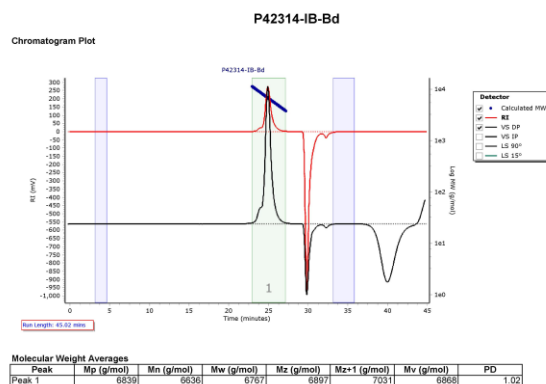
Solubility:

The polymer is soluble in THF, CHCl_3 , toluene and hexane.

^1H -NMR spectrum of the sample:



SEC chromatograms:



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

