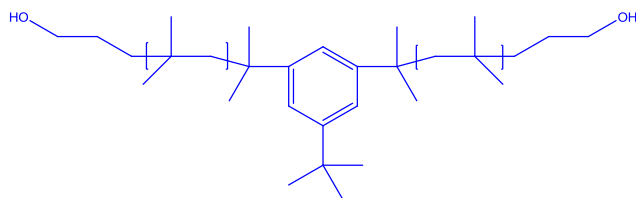


Sample Name:

α,ω -Dihydroxy Terminated Polyisobutylene

Sample #: P6486-IB2OH

Structure:

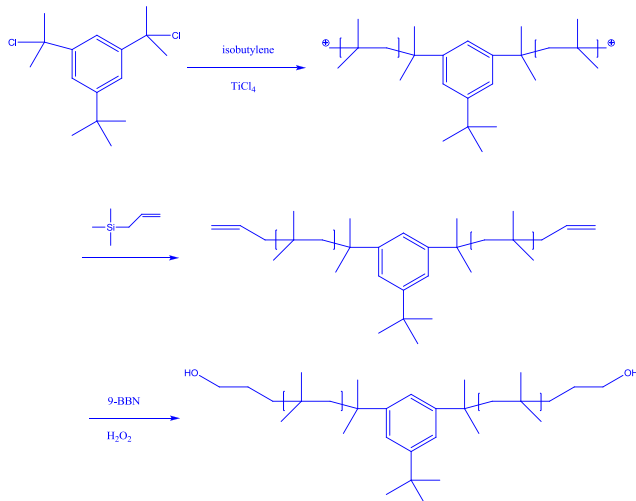


Composition:

Mn x 10 ³	PDI
3.8	1.3

Synthesis Procedure:

Allyl terminated polyisobutylene was prepared by cationic living polymerization of isobutylene. The polymerization reaction was terminated with allyltrimethylsilane. The hydroxyl was converted by 9-BBN-hydrogen peroxide method. The scheme of the reaction is illustrated below:



Characterization:

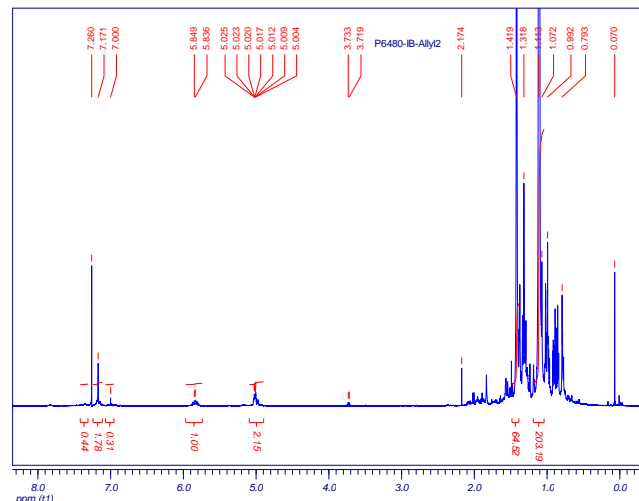
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

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

Solubility:

The polymer is soluble in THF, CHCl₃, toluene, hexane, and can be precipitated from methanol, acetone, ethanol, water.

NMR spectrum of the sample:



SEC of Sample:

