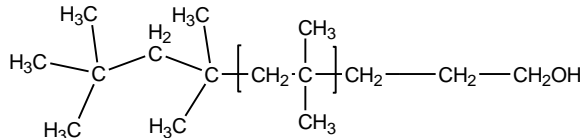


Sample Name: Poly(isobutylene), ω -hydroxy-terminated

Sample #: P42337B-IBOH

Structure:



Composition:

Mn x 10 ³	PDI
8.5	1.05
OH functionality >85%	

Synthesis Procedure:

The polymer synthesized in Propane and CH₃Cl solution at -50°C using TMPCl cationic catalyst.

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.

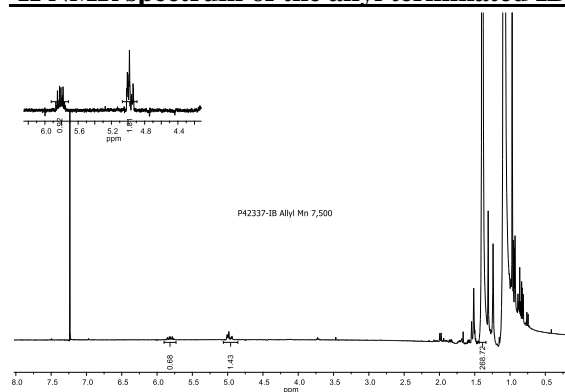
Functionality: The polymer's functionality was determined by ¹H-NMR spectroscopy.

In order to check OH functionality it was titrated with a known concentration of K naphthalene and found the functionality is higher than 77%.

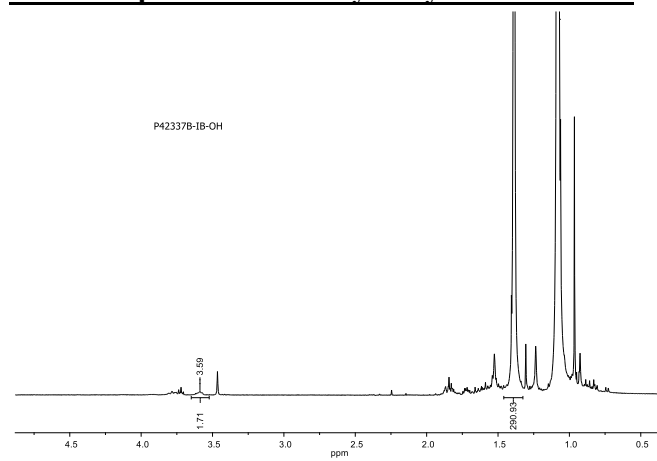
Solubility:

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

¹H NMR spectrum of the allyl terminated IB:

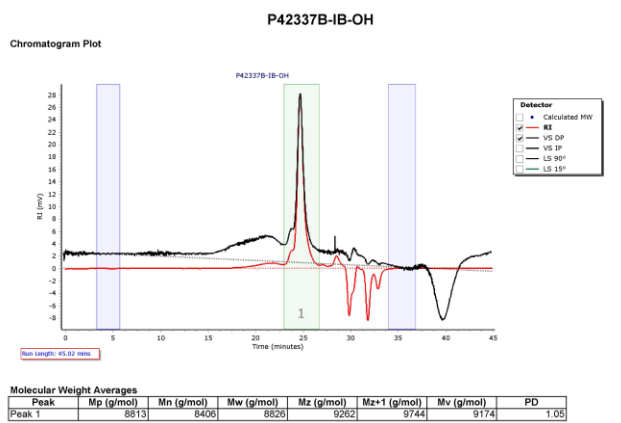


¹H NMR spectrum of the Hydroxy terminated IB:



SEC elugram of the Sample:

Agilent GPC/SEC Software



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

