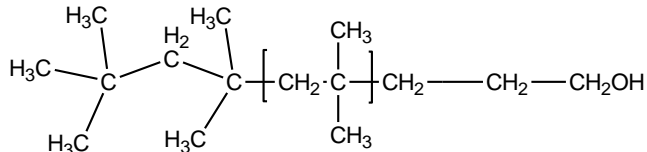


**Sample Name:** Poly(isobutylene),  $\omega$ -hydroxy-terminated

**Sample #:** P42334A-IBOH

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
8.5	1.04
OH functionality	>95%

**Synthesis Procedure:** In Propane and CH<sub>3</sub>Cl solution at -50°C using TMPCl cationic catalyst.

**Characterization:**

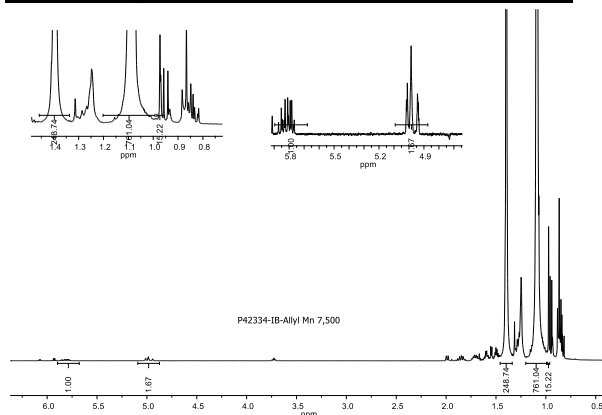
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

**Functionality:** The polymer's functionality was determined by <sup>1</sup>H-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%.

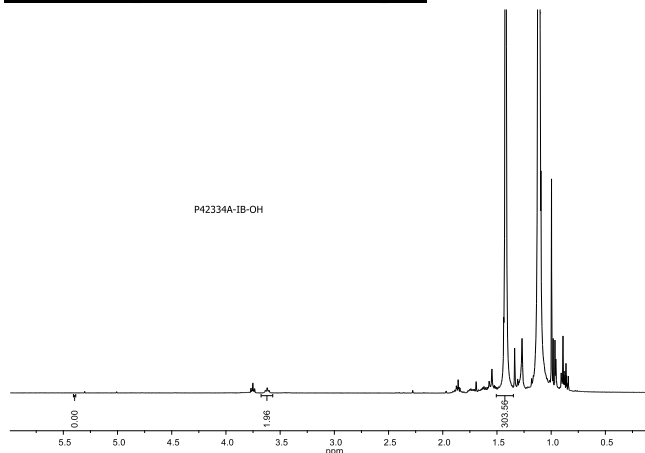
**Solubility:**

The polymer is soluble in THF, CHCl<sub>3</sub>, toluene, hexane and acetone. It can be precipitated from methanol, ethanol and water.

**<sup>1</sup>H NMR spectrum of the allyl terminated IB:**

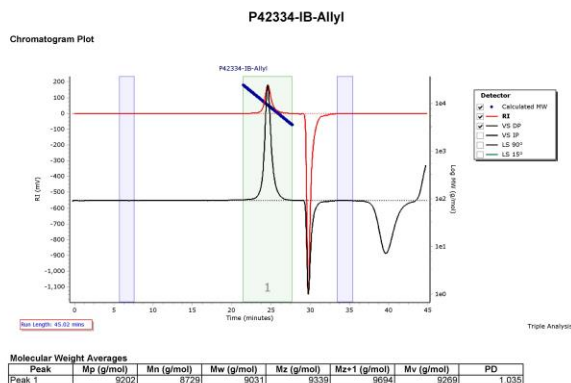


**<sup>1</sup>H NMR spectrum of the Sample:**



**SEC elugram of the allyl terminated PIB:**

Agilent GPC/SEC Software



Triple Analysis

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	9202	8729	9031	9339	9694	9269	1.035