

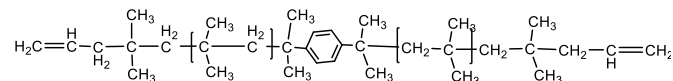
Sample Name:

**$\alpha,\omega$ -Di Allyl end terminated Polyisobutylene**

*Using dicumyl Chloride initiator*

Sample #: **P44172A-IB2Allyl**

**Structure:**

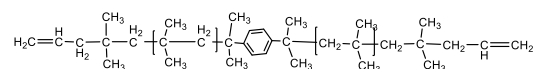
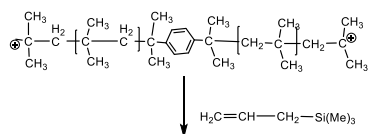
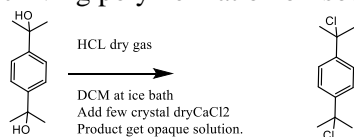


**Composition:**

Mn x 10 <sup>3</sup>	PDI
2.0	1.35
Allyl Functionality ~95%	
Purified by Soxhlet in Hot Acetone	

**Synthesis Procedure:**

Allyl terminated polyisobutylene was prepared by cationic living polymerization of isobutylene:



**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.

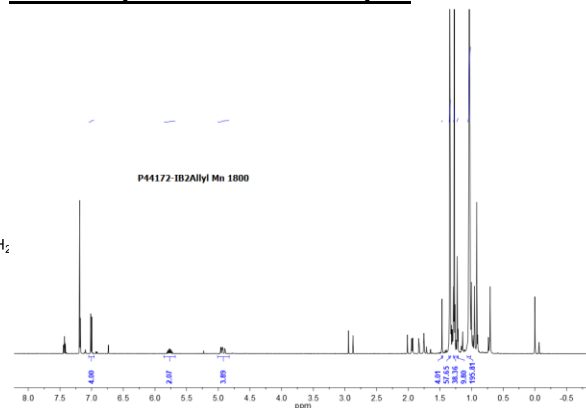
**Functionality:**

The polymer's functionality was determined by <sup>1</sup>H-NMR spectroscopy.

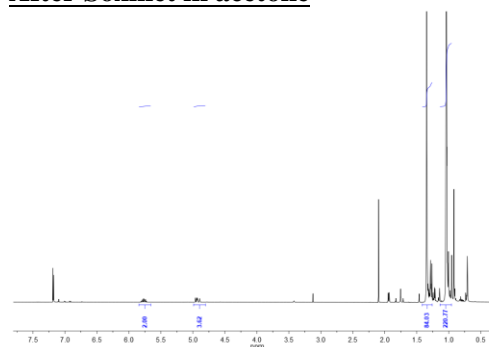
**Solubility:**

The polymer is soluble in THF, CHCl<sub>3</sub>, toluene, and hexane.

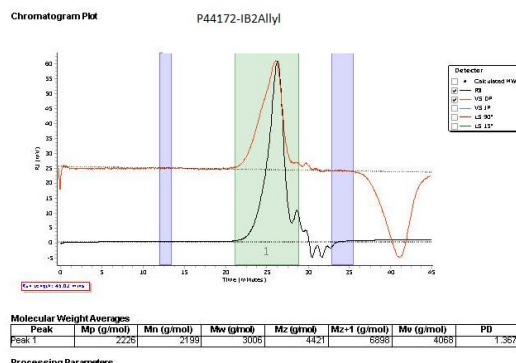
**<sup>1</sup>H-NMR spectrum of the sample:**



**After Soxhlet in acetone**



**SEC profile of the Sample:**



Molecular Weight Averages						
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mz (g/mol)
Peak 1	22.26	2199	3095	4421	6095	4095

Dispersion Parameters