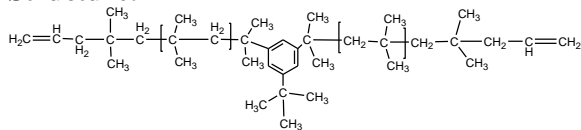


Sample Name:

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

Sample #: P44273-IB2Allyl

**Structure:**

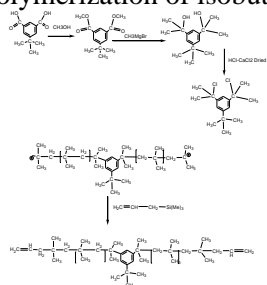


**Composition:**

Mn x 10 <sup>3</sup>	PDI
1.6	1.3
Allyl Functionality ~95%	

**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.

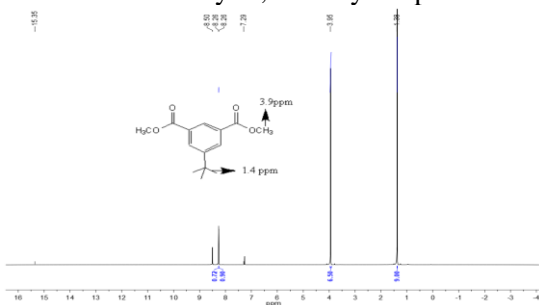
**Functionality:** The polymer's functionality was determined by <sup>1</sup>H-NMR spectroscopy.

**Solubility:**

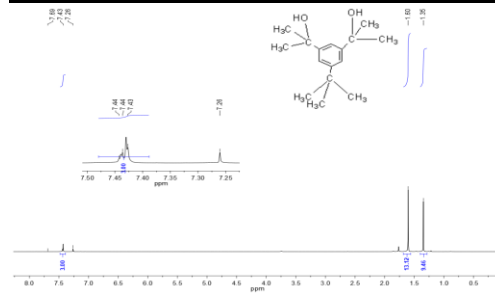
The polymer is soluble in THF, CHCl<sub>3</sub>, toluene, and hexane.

**HNMR of the catalyst:**

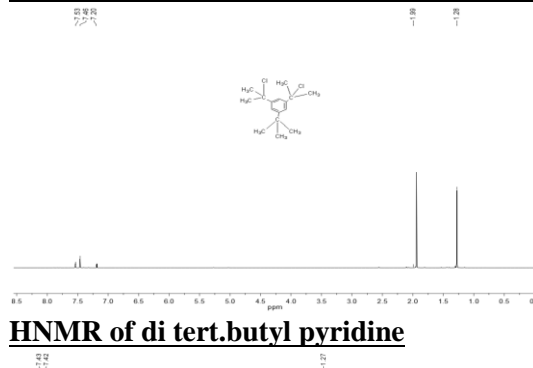
1. 5-Ter.butyl 1,3-methyl isophthalate



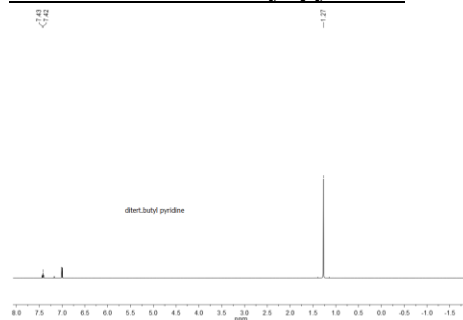
**HNMR of 5 tert.butyl –isopropenyl alcohol**



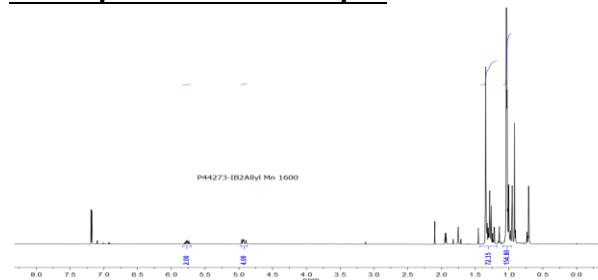
**HNMR of 5-tert butyl isopropenyl chloride**



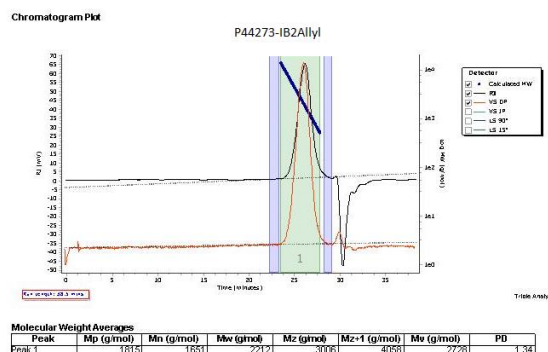
**HNMR of di tert.butyl pyridine**



**NMR spectrum of the sample:**



**SEC profile of the Sample:**



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mw (g/mol)	PD
Peak 1	1015	1651	2212	3006	4050	2720	1.34