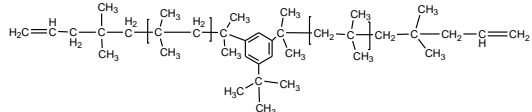


## $\alpha,\omega$ -Di Allyl end terminated Polyisobutylene

**Sample #: P44262-IB2Allyl**

### Structure:

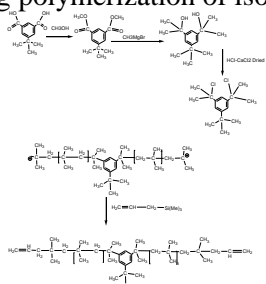


### Composition:

Mn x 10 <sup>3</sup>	PDI
1.0	1.11
Allyl Functionality ~90%	

### 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.

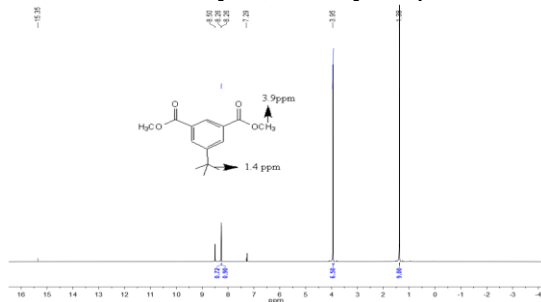
**Functionality:** The polymer's functionality was determined by  $^1\text{H}$ -NMR spectroscopy.

**Solubility:**

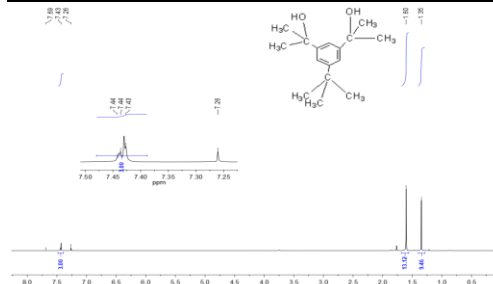
The polymer is soluble in THF, CHCl<sub>3</sub>, toluene, hexane.

### HNMR of the catalyst:

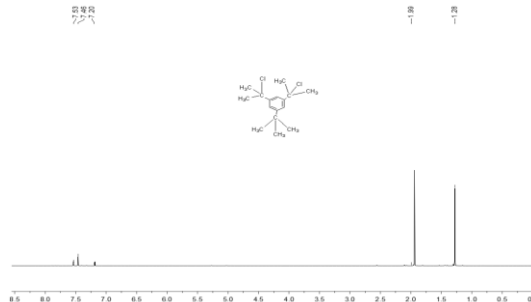
1. 5-Ter.butyl 1,3-methyl isophthalate



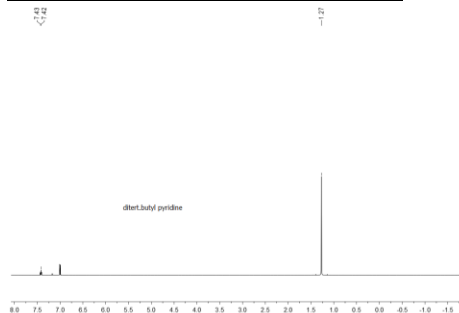
### HNMR of 5 tert.butyl –isopropenyl alcohol



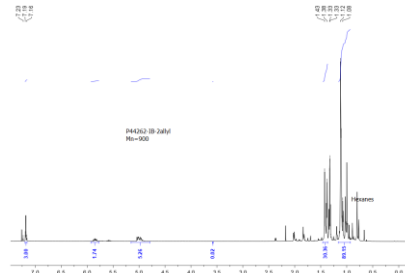
### HNMR of 5-tert butyl isopropenyl chloride



### HNMR of di tert.butyl pyridine



**NMR spectrum of the sample crude:**



### SEC profile of the Sample:

