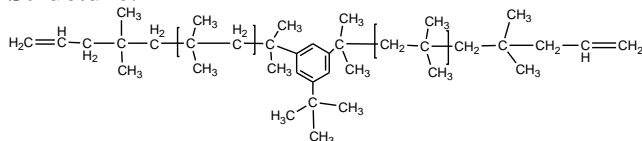


Sample Name:

α,ω -Di Allyl end terminated Polyisobutylene

Sample #: **P6480-IB2Allyl**

Structure:

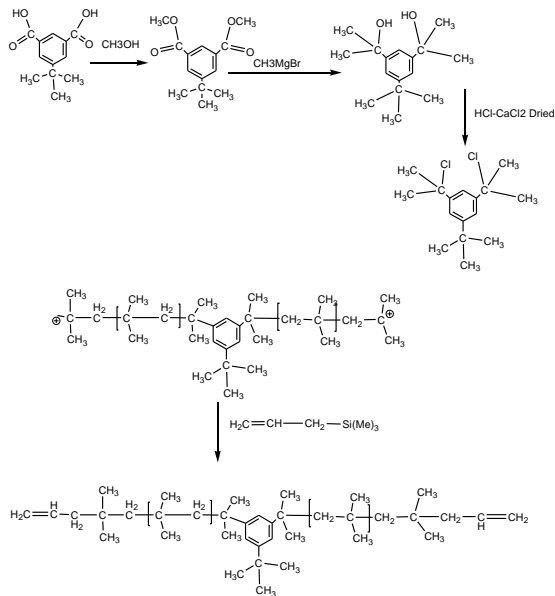


Composition:

$M_n \times 10^3$	PDI
3.8	1.3

Synthesis Procedure:

Allyl terminated polyisobutylene was prepared by cationic living polymerization of isobutylene. The polymerization reaction was terminated with allyltrimethylsilane. The scheme of the reaction is illustrated below:



Characterization:

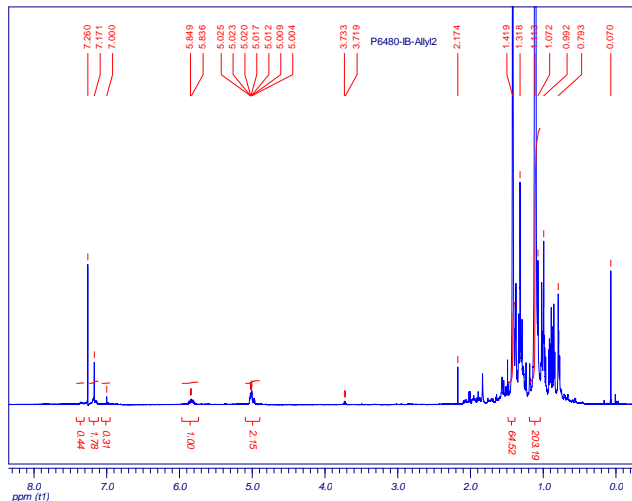
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

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

Solubility:

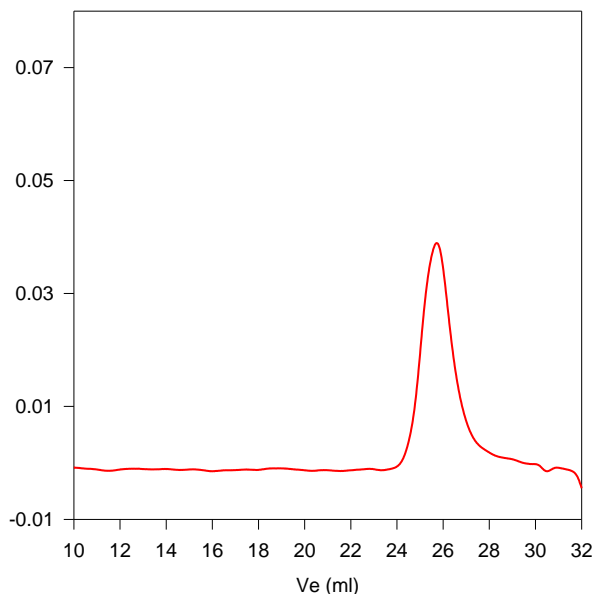
The polymer is soluble in THF, CHCl_3 , toluene, hexane, and can be precipitated from methanol, acetone, ethanol, water.

NMR spectrum of the sample:



SEC profile of the Sample:

P6480-IB-2allyl



Size exclusion chromatography of divinyl terminated polyisobutylene:

$$M_n=3800, M_w=4900, M_w/M_n=1.30$$