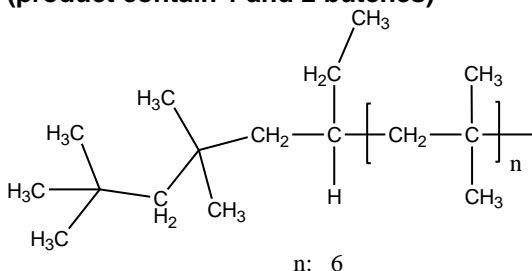


**Sample Name: Oligomer of Polyisobutylene (Hexamer)**

**Sample #: P9350A-IB**  
(product contain 1 and 2 butenes)



**Composition:**

Mn x 10 <sup>3</sup>	PDI
0.370	1.05
% of 1, and 2 butenes	5%

**Synthesis Procedure:**

Oligomers of Polyisobutylene is synthesized by living cationic polymerization of isobutylene in hexane at -78 °C using a tin based catalyst and a 2,4,4-dimethyl pentene / HCl initiator.

**Purification:**

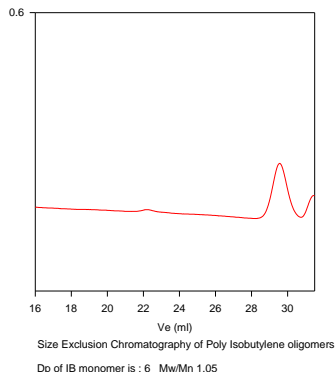
After polymerization the catalyst residues are removed by filtration and washing with acidic water after which the pH is returned to nominal values and finally the polymer is freeze dried.

**Characterization:**

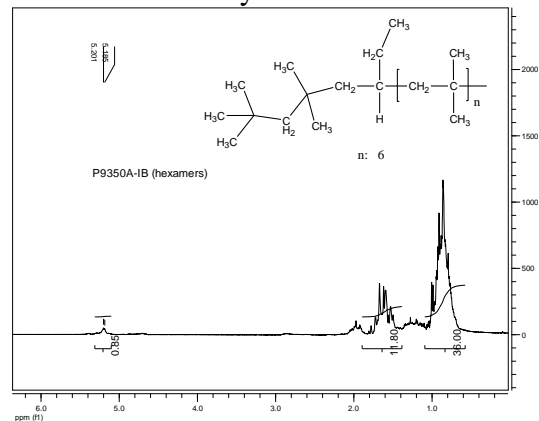
The molecular weight and polydispersity index (PDI) of polyisobutylene are obtained by size exclusion chromatography.

**SEC of Homopolymer:**

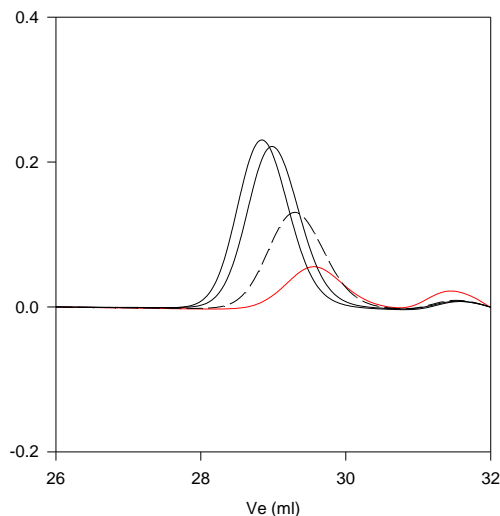
P9350A-Isobutylene Oligomers



**HNMR of the Polymer:**



**Isobutylene Oligomers**



Dp of IB monomer is :

n: 6 Mw/Mn 1.05

n: 7 Mw/Mn 1.05

n: 9 Mw/Mn 1.05

n: 10 Mw/Mn 1.05