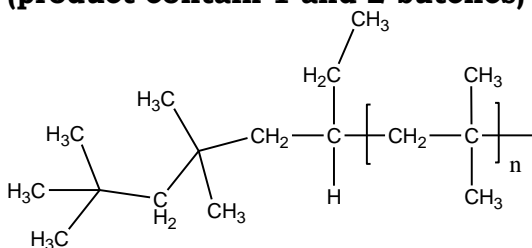


Sample Name: **Polyisobutylene**

SEC of Homopolymer:

Sample #: **P9351C-IB**  
**(product contain 1 and 2 butenes)**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
1.7	1.8
% of 1, and 2 butenes	2%

**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.

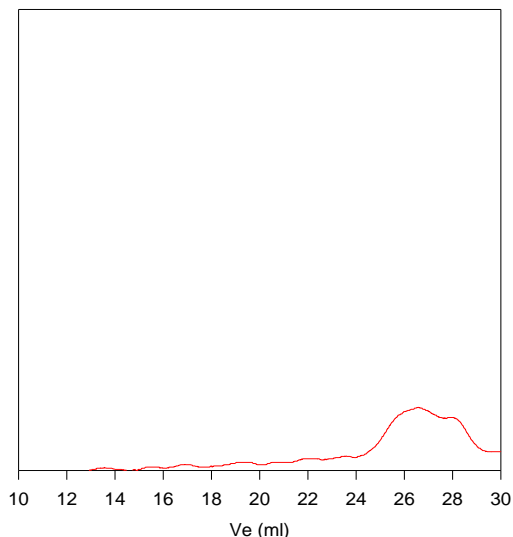
**Purification:**

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.

**P9351C-IB**



Size Exclusion Chromatogram of Polyisobutylene:

M<sub>n</sub>=1700, Mw: 3000 M<sub>w</sub>/M<sub>n</sub> = 1.8

**HNMR of the Polymer:**

