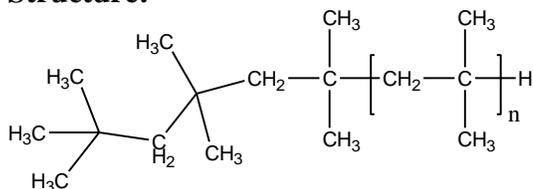


Sample Name: Polyisobutylene

SEC elugram of the Sample:

Sample #: P40497S-Ib

Structure:

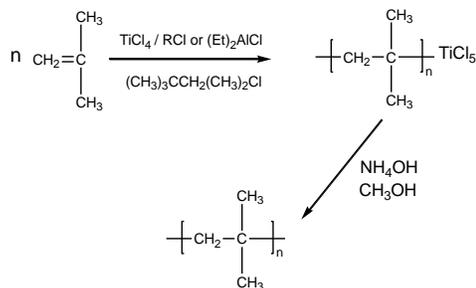


Composition:

$M_n \times 10^3$	PDI
118.5	1.9

Synthesis Procedure:

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. The reaction scheme is shown below:



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:

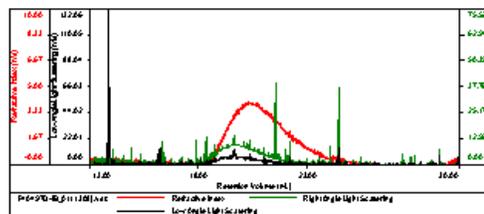
The molecular weight and polydispersity index (PDI) of polyisobutylene are obtained by size exclusion chromatography.

Solubility:

Polyisobutylene is soluble in THF, toluene, hexane, pentane and cyclohexane and precipitates from methanol and ethanol.

P40497S-IB

Concentration mg/mL	0.185
Sample dried (mg)	0.120
Flow rate mL/min	P520K of 1000 10000 vcm
Column Set	Sh. RL 1190000
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P40497 IB_01(1308)	118,530	226,320	1.909	2.5184	234,308