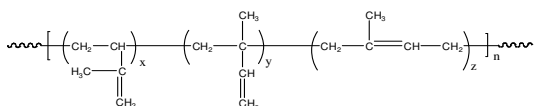


Sample Name: Polyisoprene
1,4- addition and 1,2 and 3,4 rich addition

Sample #: P3687-IP



Composition:

1,2 addition 25%mol
 3,4 addition 70%mol
 1,4 addition 5%mol

Mn x 10 ³	PDI
5.8	1.04
T _g (°C)	-15

Synthesis Procedure:

Polyisoprene is obtained by living anionic polymerization of isoprene in polar media.

Characterization:

The molecular weight was calculated from NMR and polydispersity index (PDI) was obtained by size exclusion chromatography. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co. The composition of the microstructure was calculated from NMR.

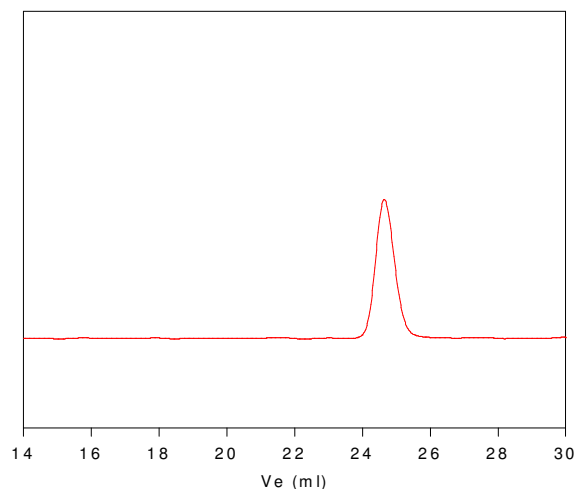
Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T_g) has been considered.

Solubility:

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

SEC of Homopolymer:

P3687-Ip



Size Exclusion Chromatogram of Polyisoprene (1,2 or 3,4 addition):

M_n = 5800, M_w = 6000, M_w/M_n = 1.04

Thermogram for the polymer

