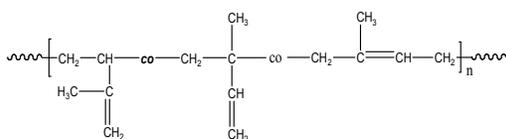


Sample Name: Polyisoprene
1,4- addition and 1,2 and 3,4 rich addition

Sample #: P11356-IP



Composition:

1,2 addition 40%mol
 3,4 addition 65%mol
 1,4 addition 5%mol

Mn x 10 ³	PDI
62.0	2.1
T _g (°C)	-5

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.

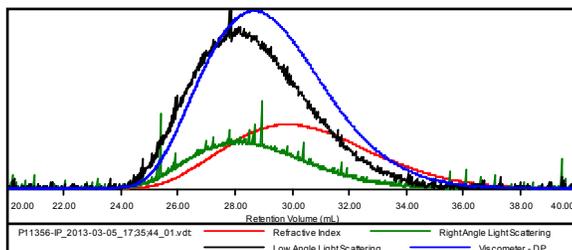
Solubility:

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

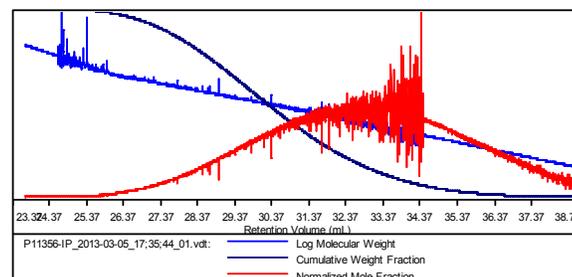
SEC of Homopolymer:

Sample ID: P11356-IP

Concentration (mg/mL)	4.9919
Sample dn/dc (mL/g)	0.1250
Method File	PS80K-Mar-2013-0002.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn (Da)	Mw (Da)	Mp (Da)	Mw/Mn	IV (dL/g)
P11356-IP_2013-03-05_17:35:44_01.vdt	61,938	133,585	115,928	2.157	1.3922



Thermogram for the polymer

