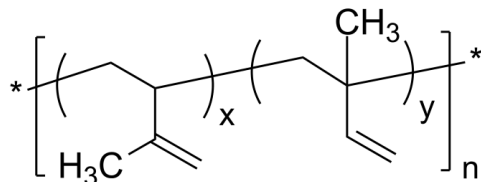


1,2 and 3,4 rich addition

Structure:



1,4 addition 5%mol

Mn x 10 ³	PDI
1.5	1.15
T _g (°C)	-08

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

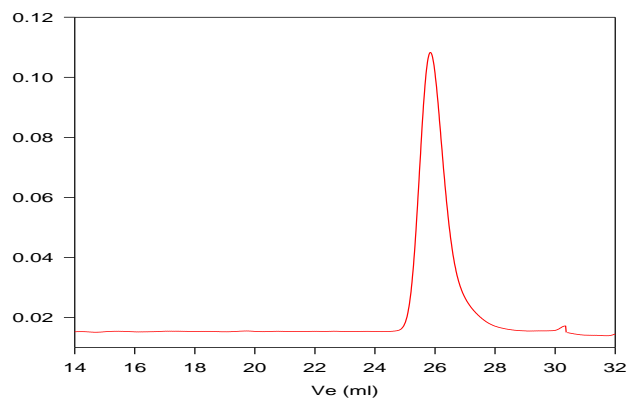
The molecular weight was calculated from NMR and polydispersity index (PDI) was obtained by size exclusion chromatography. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were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

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

1H NMR spectrum of P 7055-1P in CDCl₃. The spectrum shows several multiplets and a sharp singlet. The x-axis is labeled 'ppm (delta)' and ranges from 0.0 to 8.0. The y-axis is labeled 'Intensity'. The spectrum is divided into several regions with chemical shift markers: 0.986, 1.272, 1.424, 1.505, 1.975, 3.716, 3.727, 3.798, 4.462, 4.487, 4.975, 5.344, 5.369, 5.792, and 7.280. The spectrum shows a sharp singlet at 7.280 ppm, a multiplet at 5.792 ppm, a multiplet at 5.344 ppm, a multiplet at 5.369 ppm, a multiplet at 4.975 ppm, a multiplet at 4.462 ppm, a multiplet at 4.487 ppm, a multiplet at 3.716 ppm, a multiplet at 3.727 ppm, a multiplet at 3.798 ppm, a multiplet at 1.975 ppm, a multiplet at 1.505 ppm, a multiplet at 1.424 ppm, a multiplet at 1.272 ppm, a multiplet at 0.986 ppm, and a multiplet at 0.720 ppm.

P7055-IP



1,4 addition 5%mol

Heat Flow (W/g)

Temperature (°C)

-11.86°C

-7.89°C(T_g)

-4.80°C

Exo Up

Universal V4.2E TA Instruments