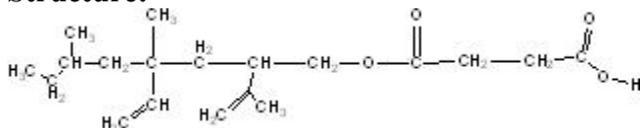


Sample Name: COOH Terminated PolyIsoprene , 1, 2 and 3,4 -rich microstructure

Sample #: P10726A-IPCOOH

Structure:



Composition:

$M_n \times 10^3$	PDI
6.0	1.25
COOH functionality	> 85%

Synthesis Procedure:

Buy anionic polymerization process.

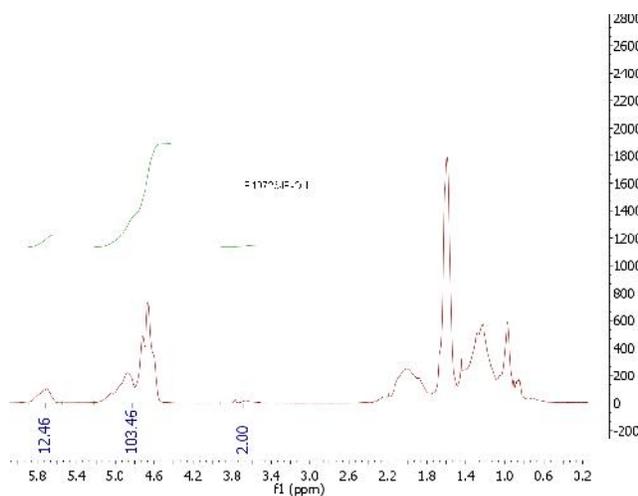
Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. 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.

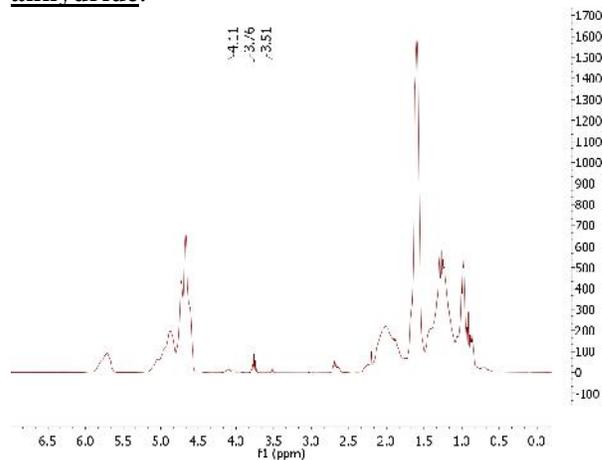
Solubility:

Polymer is soluble in THF, toluene, hexane, cyclohexane and CHCl_3 . It precipitates from methanol, ethanol and water.

^1HMR of the polymer OH end functionalized Poly isoprene



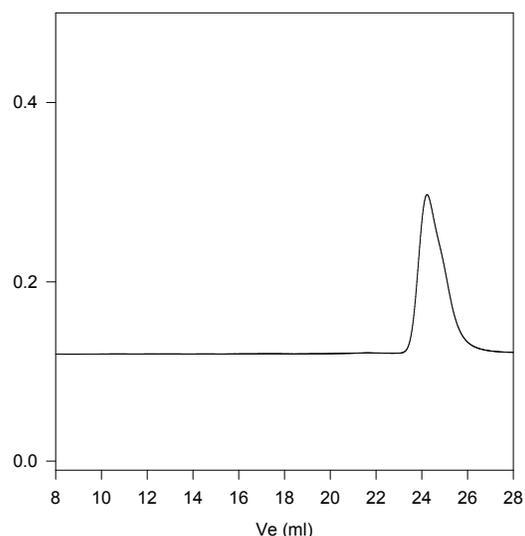
After reaction of OH terminated PIP with succinic anhydride:



SEC before reaction with succinic anhydride:

P10726-IPOH

Poly isoprene rich in 2,3 and 3,4 addition



Size exclusion chromatography of Hydroxy terminated poly(Isoprene)

— OH terminated polyisoprene $M_n=6000$, $M_w=7500$, $PI=1.25$