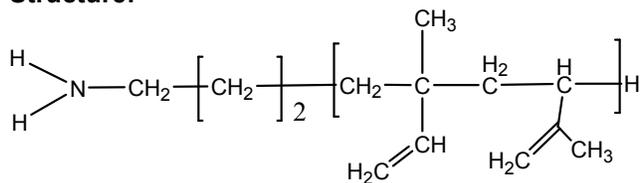


Sample Name: Amino Terminated Polyisoprene, 1,2 and 3,4 -microstructure rich

Sample #: P11182A-IPNH2

Structure:

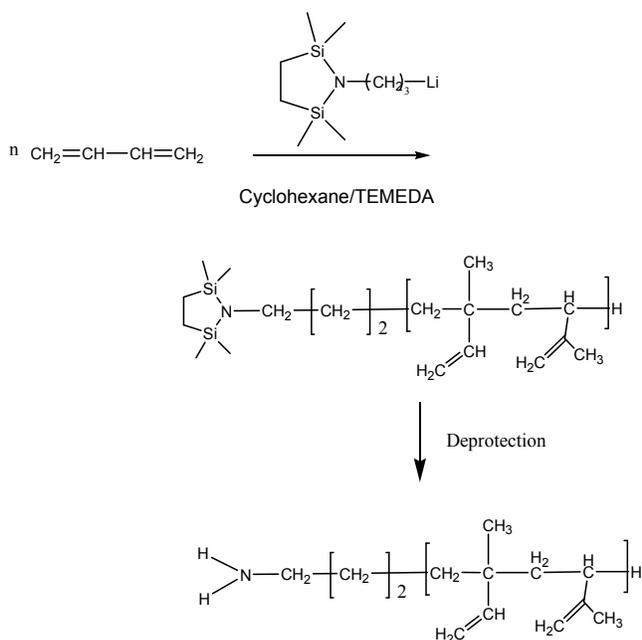


Composition:

Mn x 10 ³	PDI
30.0	1.45
Functionality	>95%

Synthesis Procedure:

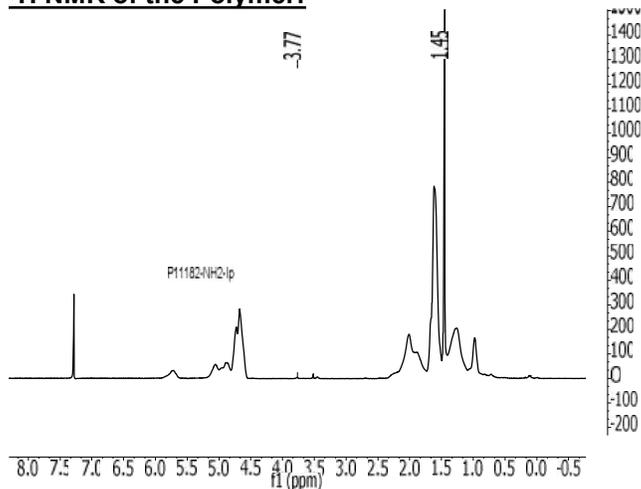
1,2 and 3,4 -addition NH₂ terminated polyisoprene was prepared by anionic living polymerization using amino protected initiator



Characterization:

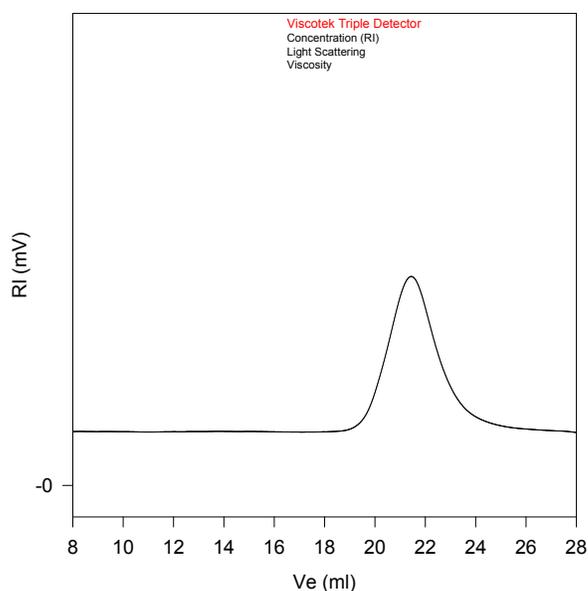
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. However, amino terminated polystyrene was found to interact with chromatography columns and therefore the amino group was protected by reaction with 1-naphthyl isocyanate before GPC analysis. Removal of the protecting group was confirmed by UV spectroscopy and the degree of functionality was confirmed by titration with HClO₄ using crystal violet as the indicator.

¹H NMR of the Polymer:



GPC profile of Sample:

P11182A-IPNH2



Size Exclusion Chromatography of Poly isoprene NH₂ terminated
 — M_n = 30,000, M_w = 43,500, M_w/M_n = 1.45