

SEC of Sample:

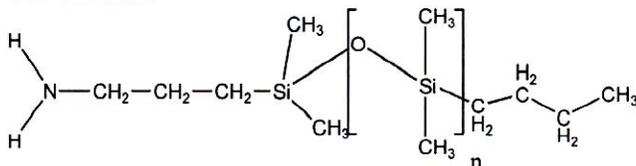
P18467-DMS SiH before Hydrosilation

Sample Name:

Amino Terminated Polydimethylsiloxane

Sample #: P18467-DMSN_H2

Structure:



Composition:

Mn x 10 ³	PDI
1.0	1.15

Synthesis Procedure:

Amino terminated polydimethylsiloxane was prepared by anionic living polymerization of hexamethyl cyclotrisiloxane .

Ref:

J.X. Zhang, S.K. Varshney, "Simple Approach for the Scale-up Production of Block Copolymer of Polydimethylsiloxane with (Meth)acrylic Ester Monomers" *Designed Monomers and Polymers*, 2002, 1, 79.

Characterization:

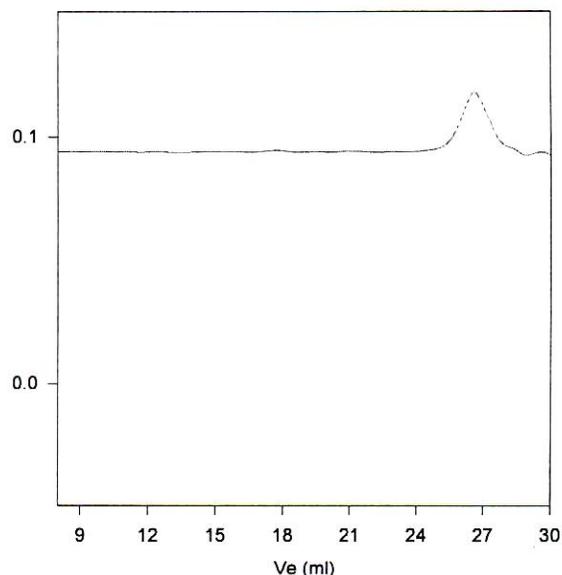
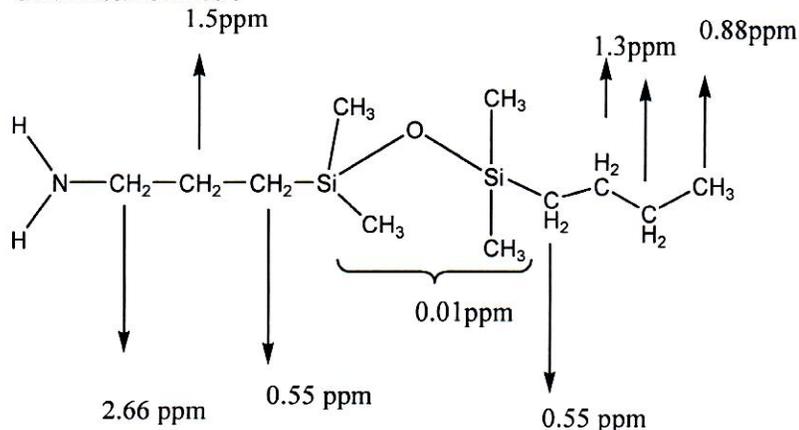
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was determined by titration with HClO₄ using crystal violet as the indicator.

Hydrosilation reaction was monitored by FTIR by the disappearance of SiH (2126cm⁻¹) to allyl amine.

Solubility:

The polymer is soluble in Hexane, Toluene CHCl₃ and THF.

Chemical Shifts :



Size exclusion chromatography of SiH- terminated poly(dimethyl siloxane):

M_n=1,000, M_w=1,100 M_w/M_n=1.15, functionality>99%

