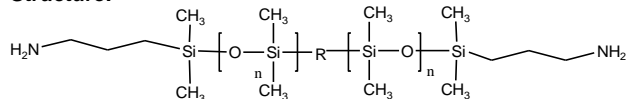


**Sample Name:**  
 $\alpha,\omega$  Amino Terminated Polydimethylsiloxane

**Sample #:** P9982-DMS2NH2

**Structure:**

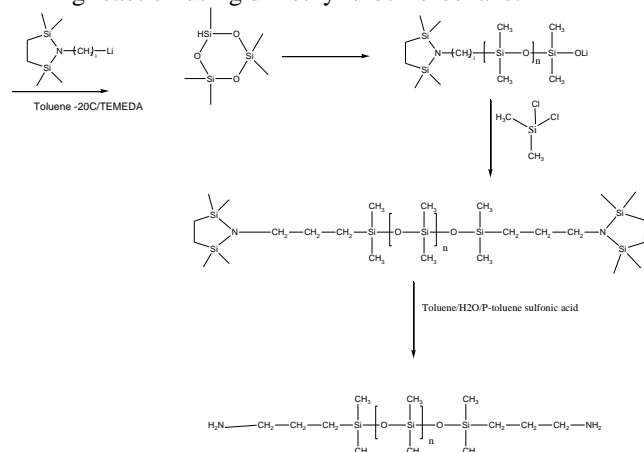


**Composition:**

Mn x 10 <sup>3</sup>	PDI
8.5	1.15
NH2 end functionality:	> 87%

**Synthesis Procedure:**

$\alpha,\omega$  diamino Terminated Polydimethylsiloxane was prepared by anionic living polymerization of hexamethyl cyclotrisiloxane, using NH2 protected initiator followed by linking reaction using dimethyl dichlorosilane.



**Characterization:**

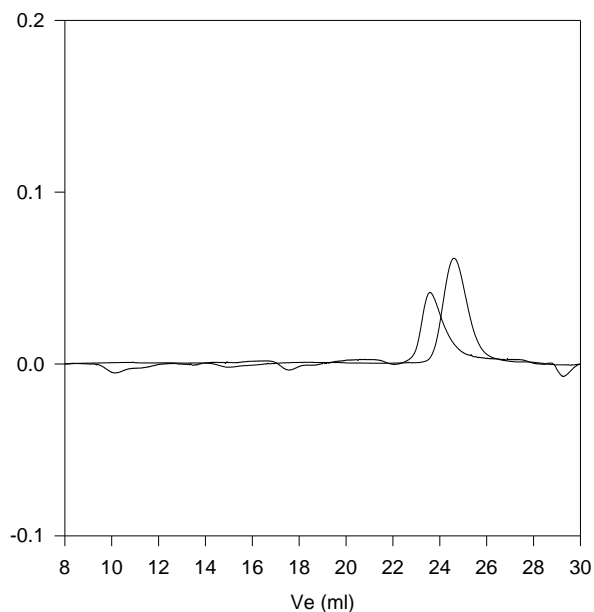
The molecular weight and polydispersity index of this polymer were by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. The functionality was determined by titration of HClO<sub>4</sub> in chloroform.

**Solubility:**

Polymer is soluble in hexane, toluene, benzene and CHCl<sub>3</sub>, THF. It precipitated out from cold ethanol, methanol.

**SEC of Sample:**

**P9982-DMS2NH2**



Size Exclusion Chromatography of diamino terminated Poly(dimethyl siloxane)

M<sub>n</sub>=4200, M<sub>w</sub>=4600, PI=1.15

After Linking reaction Mn 8500 Mw/Mn 1.15