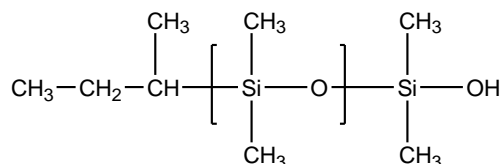


**Sample Name:** Poly(dimethyl siloxane),  
( $\alpha$ -sec-butyl,  $\omega$ -silanol)-terminated

**Sample #:** P44382-DMS-Silanol

**Structure:**



**Composition:**

|                      |      |
|----------------------|------|
| Mn x 10 <sup>3</sup> | PDI  |
| 60.0                 | 1.35 |

**Synthesis Procedure:**

The polymerization of the cyclic trimer (hexamethyl cyclotrisiloxane-D3) was initiated with Sec. Butyllithium initiator in a polar / non-polar solvents mixture. Termination of the reaction with methanol

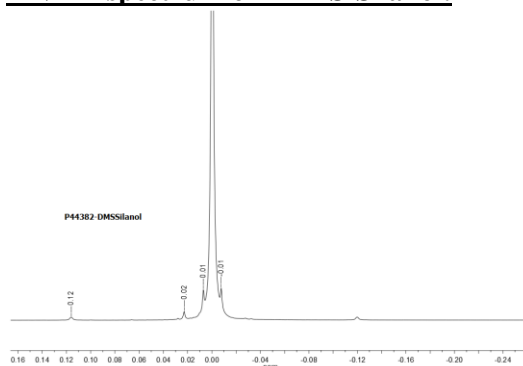
**Characterization:**

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.

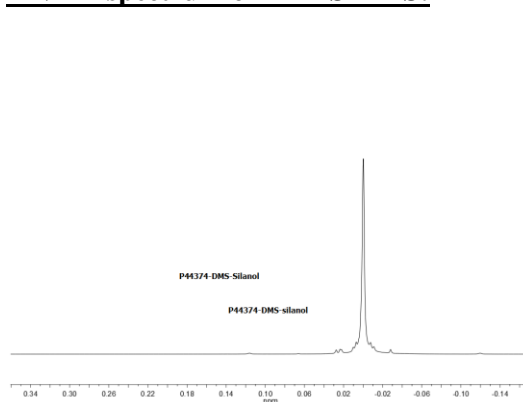
**Solubility:**

Polydimethylsiloxane is soluble in hexane, toluene, cyclohexane, THF and chloroform but precipitates from methanol and ethanol.

**HNMR spectrum of PDMS-Silanol:**



**HNMR spectrum of PDMS-TMS:**



**SEC profile of Homopolymer:**

