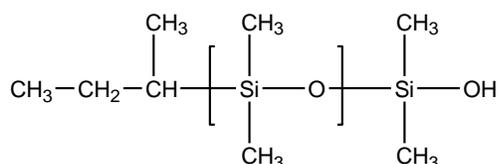


**Sample Name:** Poly(dimethyl siloxane),  
( $\alpha$ -sec-butyl,  $\omega$ -silanol)-terminated

**Sample #:** P44342K-DMS-Silanol

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
4.5	1.5

**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

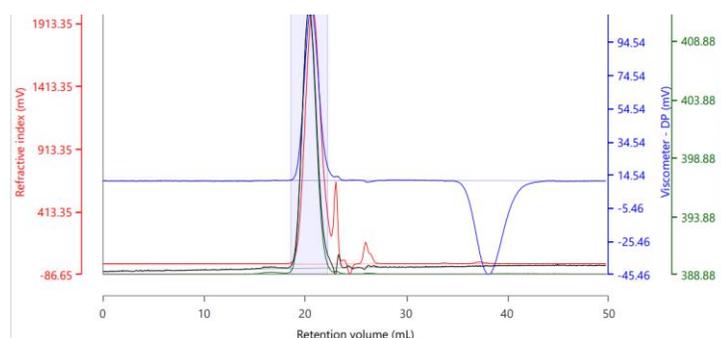
**Characterization:**

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.

**SEC profile of Homopolymer:**



Results (Columns)

P44342K Injection 1 Peak 1	
Mn (g/mol)	4,301
Mw (g/mol)	6,725
Mw/Mn	1.564
Mp (g/mol)	5,800