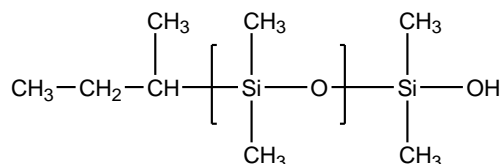


**Sample Name:** Poly(dimethyl siloxane),  
( $\alpha$ -sec-butyl,  $\omega$ -silanol)-terminated

**Sample #:** P45166C-DMS-Silanol

**Structure:**

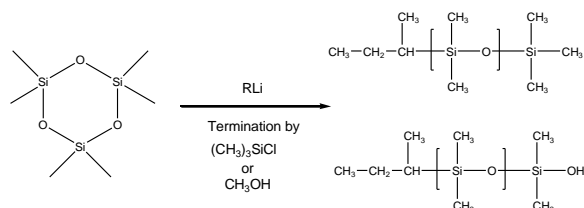


**Composition:**

Mn x 10 <sup>3</sup>	PDI
77.0	1.35

**Synthesis Procedure:**

The polymerization of the cyclic trimer (hexamethyl cyclotrisiloxane-D3) was initiated with a monofunctional lithium based initiator in a polar / non-polar solvent mixture.



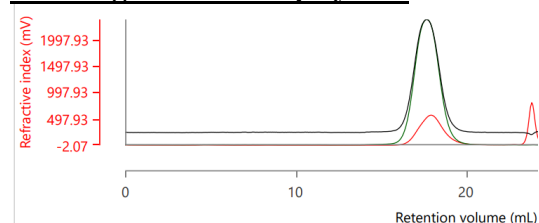
**Characterization:**

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 elugram of Homopolymer:**



Sequence (Rows)

Injection Name	Sample name	Sample dn/dc (mL/g)	Sequence execution
P45166-C1 Injection 1	P45166-C1	0.08	2025-03-02 5:36:37

Results (Rows)

Injection Name	Mn (g/mol)	Mw (g/mol)	Mp (g/mol)	Mw/Mn
P45166-C1, Injection 1, Peak 1	76,961	105,303	91,718	1.368

