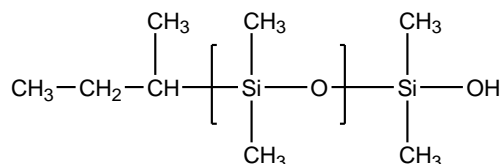


Sample Name: Poly(dimethyl siloxane),
(α -sec-butyl, ω -silanol)-terminated

Sample #: P45161D-DMS-Silanol

Structure:

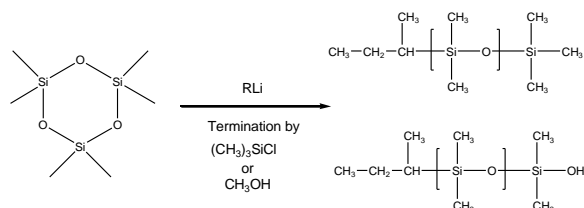


Composition:

Mn x 10 ³	PDI
106	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.



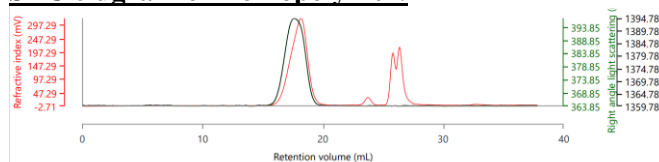
Characterization:

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 date
PDMS P45161D Injection 1	PDMS P45161D	0.057	2025-02-26 5:52:06 PM

Results (Rows)				
Injection Name	Mn (g/mol)	Mw (g/mol)	Mp (g/mol)	Mw/Mn
PDMS P45161D, Injection 1, Peak 1	106.323	145.004	102.018	1.364

