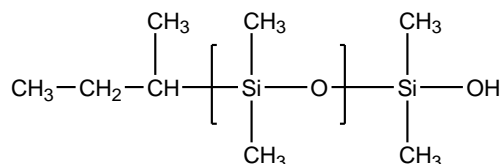


Sample Name: Poly(dimethyl siloxane),
(α -sec-butyl, ω -silanol)-terminated

Sample #: P45166E-DMS-Silanol

Structure:

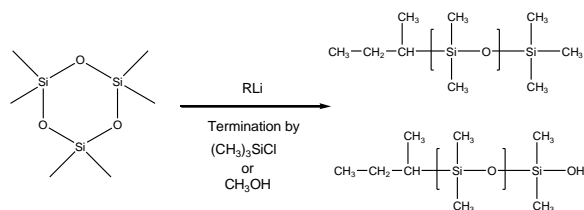


Composition:

$\text{Mn} \times 10^3$	PDI
121.0	1.3

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.



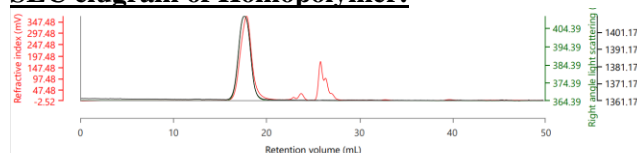
Characterization:

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:



Injection Name	Sample name	Sample dn/dc (mL/g)	Sequence execution date
PDMS P45166E Injection 1	PDMS P45166E	0.057	2025-02-27 12:33:16 PM

Injection Name	Mn (g/mol)	Mw (g/mol)	Mp (g/mol)	Mw/Mn
PDMS P45166E, Injection 1, Peak 1	120,745	155,802	133,152	1.29

