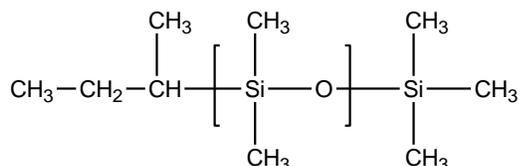


Sample Name: Poly(dimethyl siloxane), (α -sec-butyl, ω -trimethylsiloxy)-terminated

Sample #: P44342I-DMS-TMS

Structure:

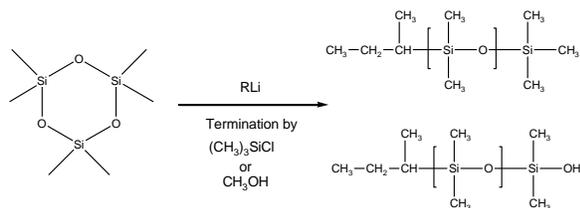


Composition:

$\text{Mn} \times 10^3$	PDI
43.0	1.45

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:

