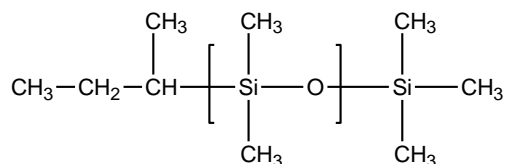


**Sample Name:** Poly(dimethyl siloxane), ( $\alpha$ -sec-butyl,  $\omega$ -trimethylsiloxy)-terminated

**Sample #:** P44346-DMS-TMS

**Structure:**

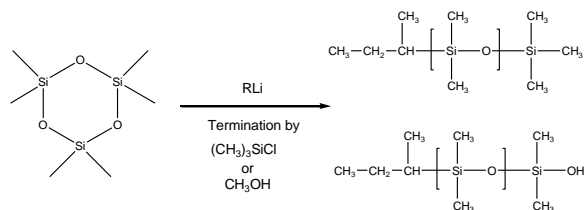


**Composition:**

| Mn x 10 <sup>3</sup> | PDI  |
|----------------------|------|
| 88.0                 | 1.19 |

**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.



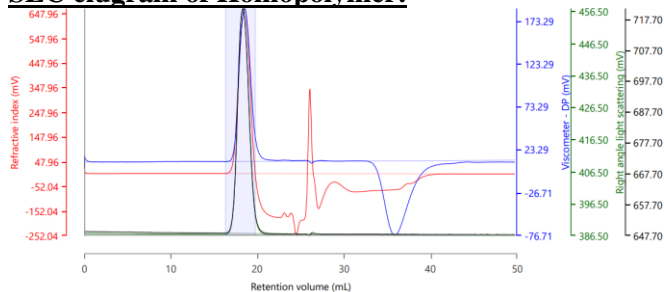
**Characterization:**

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:**



| Results (Columns)         |         |
|---------------------------|---------|
| p44346 Injection 1 Peak 1 |         |
| Mn (g/mol)                | 87,948  |
| Mw (g/mol)                | 104,743 |
| Mw/Mn                     | 1.191   |
| Mp (g/mol)                | 98,863  |