

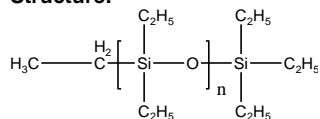
## Sample Name: Polydiethylsiloxane

## SEC of Homopolymer:

**P8366-DES**

Sample #: **P8366-DES**

### **Structure:**

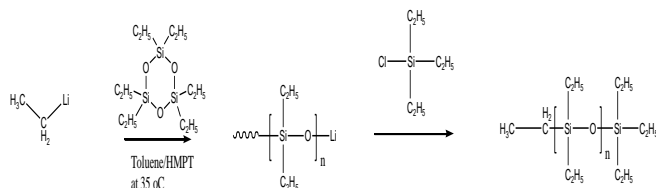


### **Composition:**

$M_n \times 10^3$	PDI
1.4	1.3

### **Synthesis Procedure:**

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

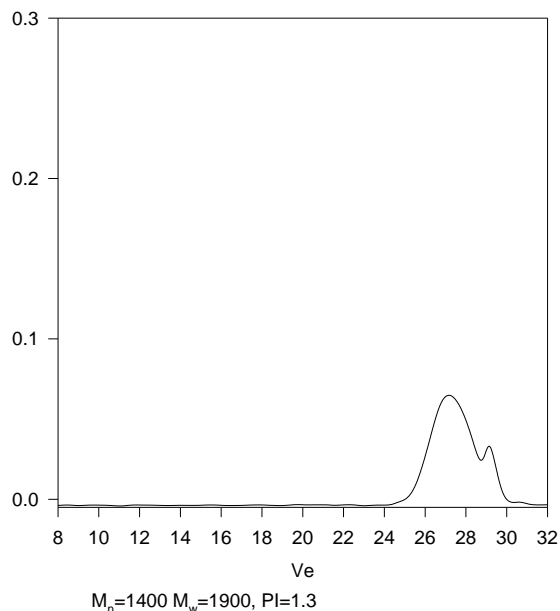


### **Characterization:**

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:**

Polydiethylsiloxane is soluble in hexane, toluene, cyclohexane, THF and chloroform but precipitates from methanol and ethanol.



### **H NMR of the Polymer:**

