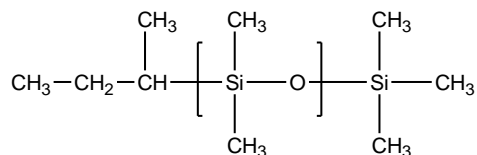


Sample Name: Sample Name:
Poly(dimethyl siloxane), (α -sec-butyl, ω -trimethylsiloxy)-terminated

Sample #: **P44378A-DMS-TMS**

Structure:



Composition:

Mn x 10 ³	PDI
22.0	1.4

Synthesis Procedure:

The polymerization of the cyclic trimer (hexamethyl cyclotrisiloxane-D3) was initiated with Sce. Butyllithium initiator in a polar / non-polar solvents mixture. Termination of the reaction with methanol.

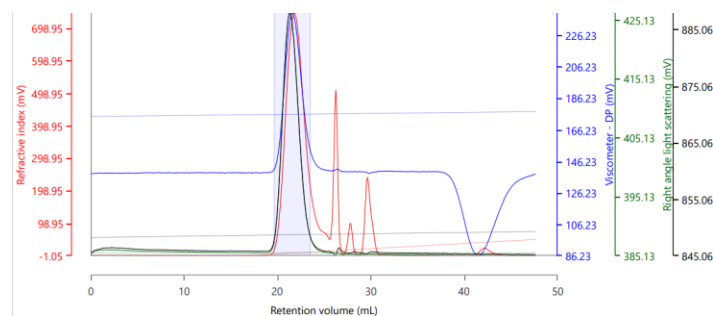
.Characterization:

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:

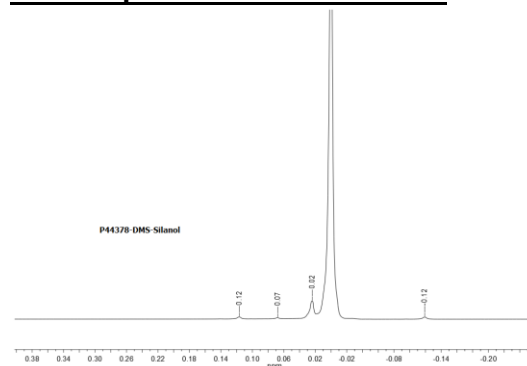
Polydimethylsiloxane is soluble in hexane, toluene, cyclohexane, THF and chloroform but precipitates from methanol and ethanol.

SEC profile of Homopolymer:



Results (Columns)	
	P44378 Injection 1 Peak 1
Mn (g/mol)	21,949
Mw (g/mol)	30,875
Mw/Mn	1.407
Mp (g/mol)	27,610

HNMR spectrum of PDMS-Silanol



HNMR spectrum of DMS-TMS

