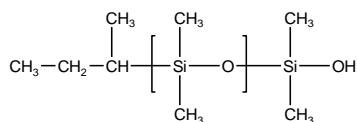


Sample Name: Poly(dimethyl siloxane), (α -sec-butyl, ω -silanol)-terminated

Sample #: P44310-DMS-Silanol

Structure:

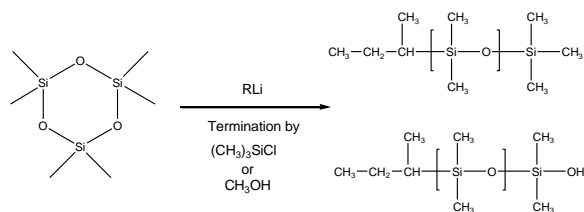


Composition:

Mn x 10 ³	PDI
6.0	1.35

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.

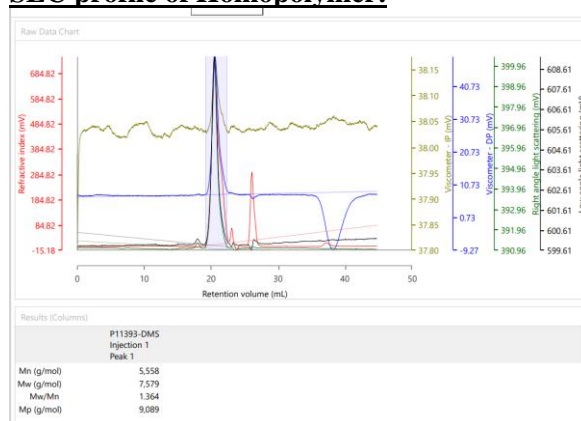
Thermal analysis:

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The melting temperature (T_m) was taken as the maximum of the endothermic peak whereas the crystallization temperature (T_c) was considered as the minimum of the exothermic peak.

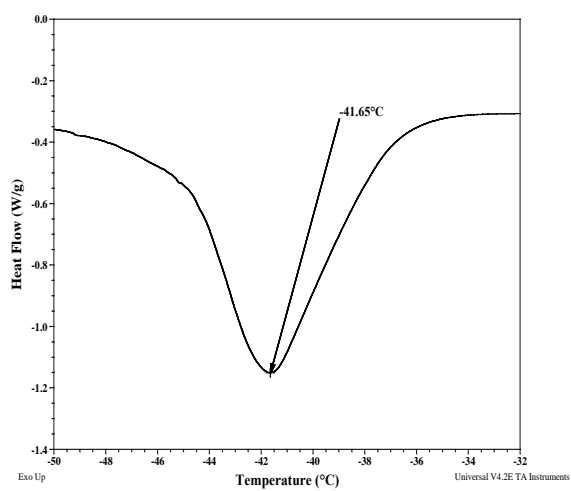
Solubility:

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

SEC profile of Homopolymer:



Melting curve for DMS:



Crystallization curve for DMS:

