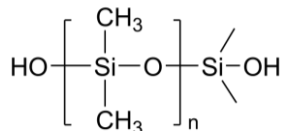


Sample Name: Poly(dimethyl siloxane), α,ω -bis(silanol)-terminated

Sample #: P9155-DMS

Structure:



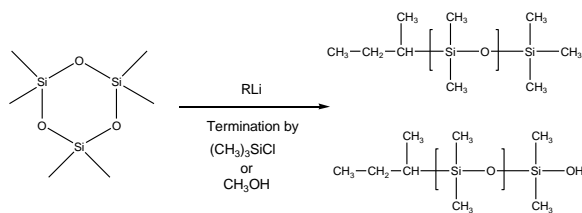
Composition:

Mn x 10 ³	PDI
25.0	1.5

T_m (°C): -43
 T_c (°C): -72
 T_g (°C): -127 (Lit.)

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).

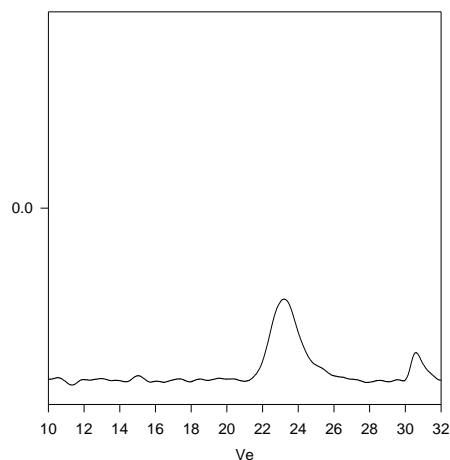
Thermal analysis:

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 where as the crystallization temperature (T_c) was considered as the minimum of the exothermic peak.

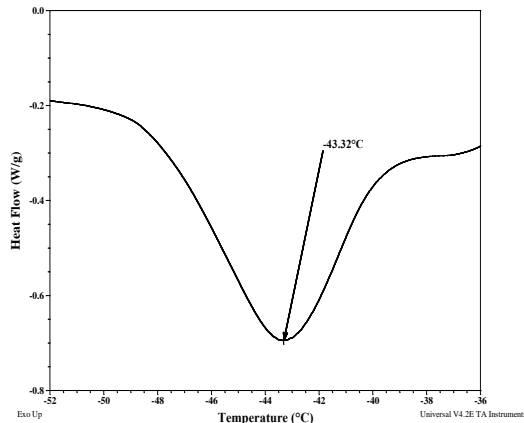
Solubility:

Polysiloxane is soluble in hexane, toluene, cylcohexane, THF and chloroform. It precipitates from methanol and ethanol.

SEC profile of Homopolymer:
P9155-DMS



Melting curve for DMS:



Crystallization curve for DMS:

