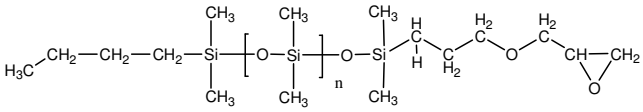
Sample Name:
Glycidyl Terminated Polydimethylsiloxane
Or Mono Epoxy terminated Polydimethylsiloxane

Sample #: **P19717-DMS-Epoxy**

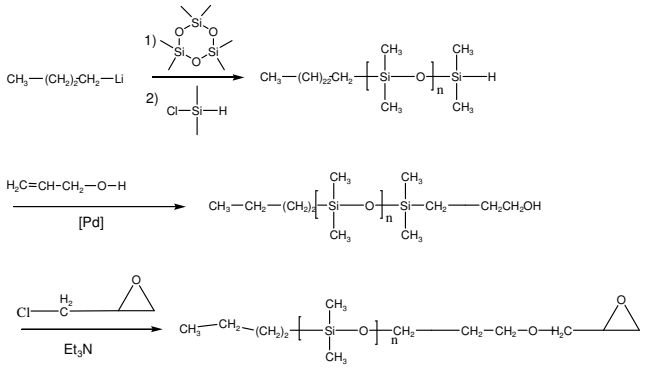
Structure:



Composition:

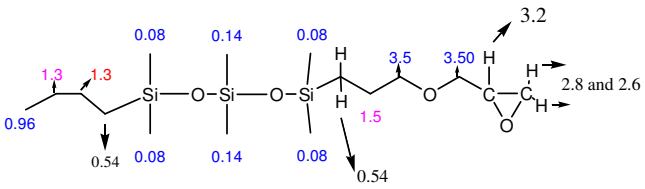
Mn x 10^3	PDI
7.0	1.15

Synthesis Procedure:
Glycidyl terminated poly(dimethyl siloxane) was prepared by living anionic polymerization of hexamethylcyclotrisiloxane(D3) followed by hydrosilation with allyl alcohol and than reacting with epichlrohydrine in THF in the presence of (Et)3N. The scheme of the reaction is illustrated below:

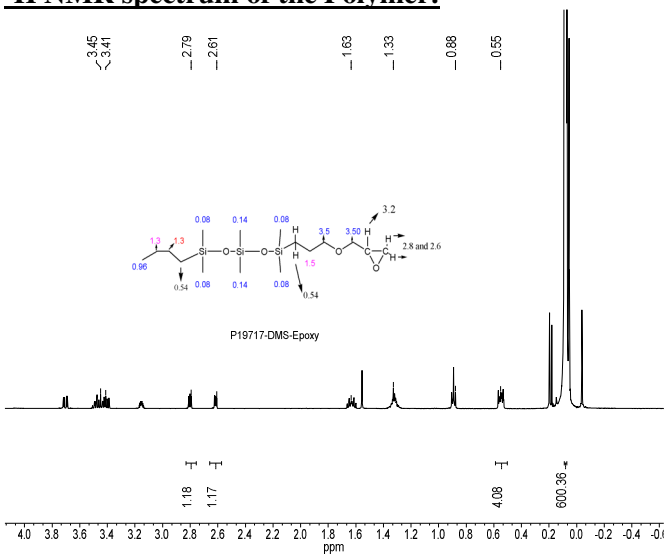


Characterization:
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

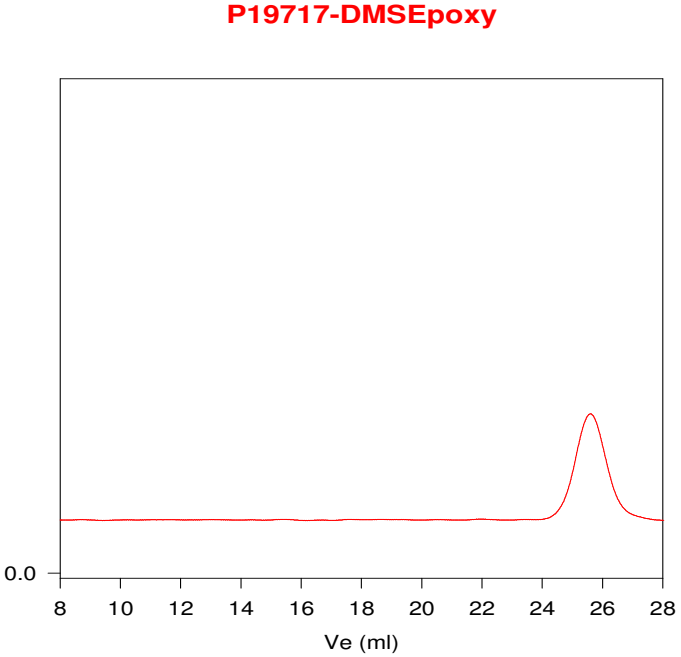
Solubility:
The polymer is soluble in $CHCl_3$, Toluene, Hexane.



^{1}H NMR spectrum of the Polymer:



SEC elugram of the Polymer:



Size Exclusion Chromatography in THF at 35 ℃ w.r.t PDMS standards.
M_n =7,000, M_w =8,000, PI=1.15