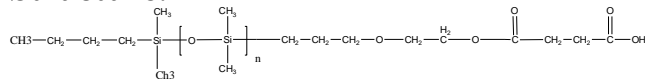


Sample Name:
Carboxy Terminated
Polydimethylsiloxane

Sample #: P4317-DMSCOOH

Structure:

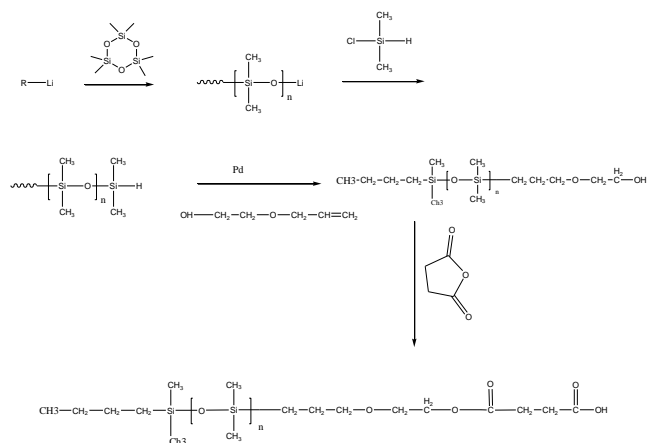


Composition:

$M_n \times 10^3$	PDI
5.0	1.15

Synthesis Procedure:

Carboxy terminated polydimethylsiloxane was prepared by living anionic polymerization of hexamethyl cyclotrisiloxane using a hydroxyl-protected initiator. The polymer was refluxed with an appropriate amount of succinic anhydride to introduce the carboxylic acid termination. The scheme of the reaction is illustrated below:



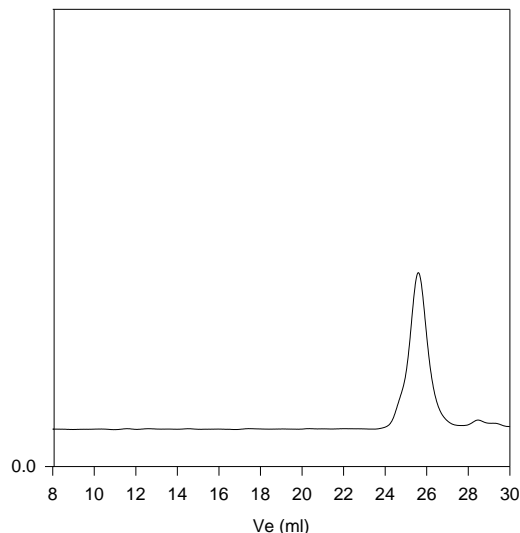
Characterization:

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:

Polymer is soluble in hexane, THF and $CHCl_3$.

SEC of Sample:
P4317-DMSCOOH



Size exclusion chromatography of monocarboxy terminated polydimethylsiloxane

— Before reacting with succinic anhydride
Polydimethylsiloxane $M_n=5000$, $M_w=5700$, $PI=1.15$