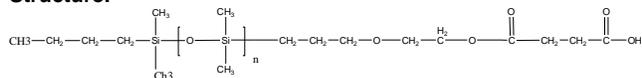


Sample Name:
Carboxy Terminated Polydimethylsiloxane

Sample #: P8644-DMSCOOH

Structure:

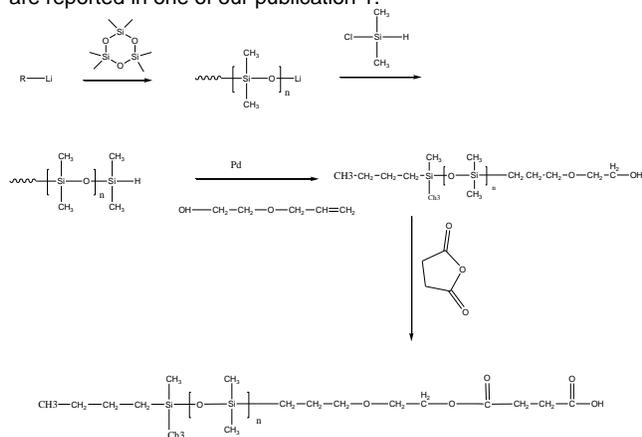


Composition:

Mn x 10 ³	PDI
5.0	1.09

Synthesis Procedure:

Carboxy terminated polydimethylsiloxane was prepared by living anionic polymerization of hexamethyl cyclotrisiloxane,. The details are reported in one of our publication 1.



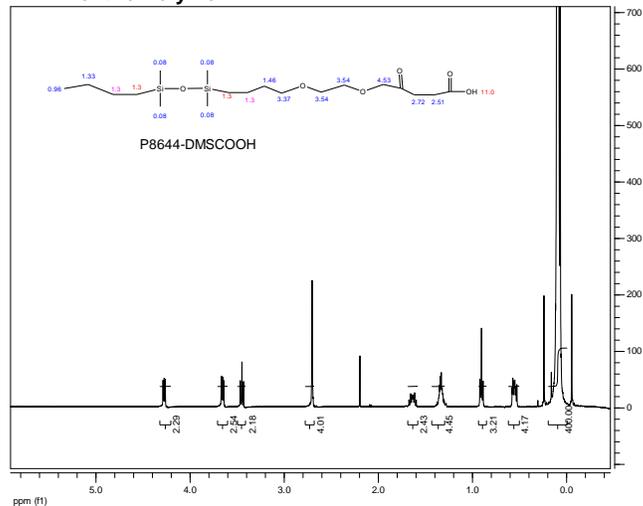
Characterization:

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:

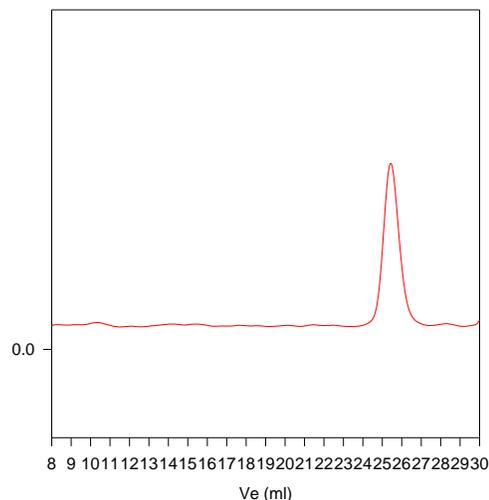
Polymer Soluble in hexane, THF, CHCl₃.

HNMR of the Polymer:



SEC of Sample:

P8644-DMSOH
(monochlorinol terminated used to obtain P8644-DMSCOOH)



Size exclusion chromatography of monochlorinol terminated poly(dimethyl siloxane):
M_n=5,000, M_w=5,400 M_w/M_n=1.09, functionality=0.94%

Reference:

- J.X. Zhang, S.K. Varshney, "Simple Approach for the Scale-up Production of Block Copolymer of Polydimethylsiloxane with (Meth)acrylic Ester Monomers" Designed Monomers and Polymers, 2002, 1, 79.