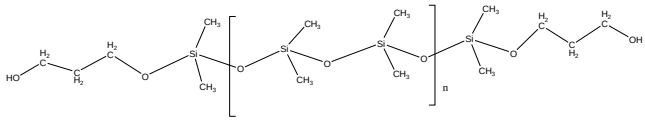
Sample Name:
α,ω-dicarbinol Terminated Polydimethylsiloxane

Sample #: **P9543-DMS2OH**

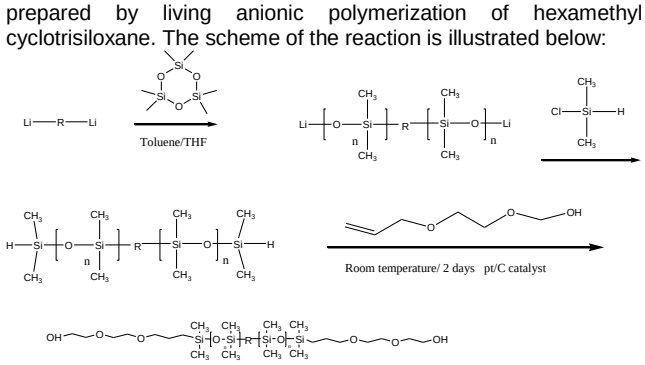
Structure:



Composition:

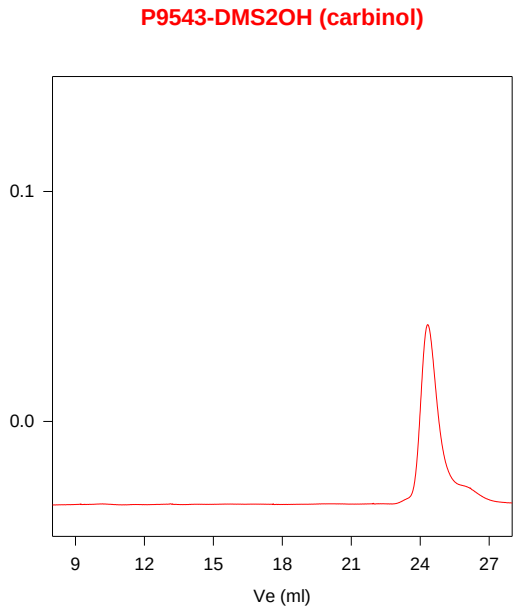
Mn x 10^3	PDI
9.0	1.08

Synthesis Procedure:
Dihydroxyl (carbinol) terminated poly(dimethyl siloxane) was prepared by living anionic polymerization of hexamethyl cyclotrisiloxane. 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.

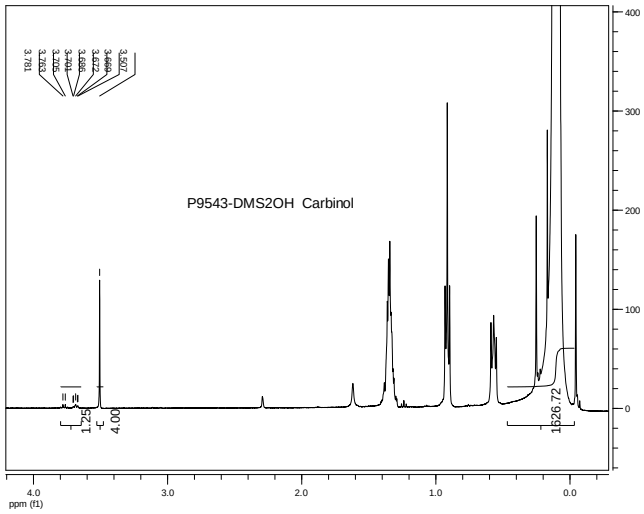
SEC of Sample:



Size exclusion chromatography of DIcarbinol terminated poly(dimethyl siloxane):

M_n=9000, M_w=9700 M_w/M_n=1.08, functionality>1.9

HNMR of the Polymer:



Reference:

1. 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.