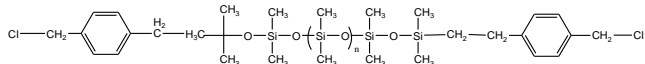


Sample Name:

α - ω dibenzyl chloride terminated Poly(dimethyl siloxane)

Sample #: P8634-DMS2BzCl

Structure:



Composition:

Mn x 10 ³	PDI
4.0	1.3

Synthesis Procedure:

α - ω dicarbinol terminated Poly(dimethyl siloxane) was prepared as described in our paper. This was reacted with (chloromethyl) phenylethyl dimethylchlorosilane in THF in the presence of (Et)₃N. Polymer was purified after passing through the column packed with silica, eluent CHCl₃.

Ref: 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

Characterization:

By Size exclusion chromatography (SEC): Varian liquid chromatograph equipped with UV and refractive detector. SEC columns from Supelco were used with THF containing 2 vol% (Et)₃N as the eluent. The molecular weights were determined using light scattering detector and viscosity detector. The molecular weights and the polydispersity indice were calculated.

Functionality:

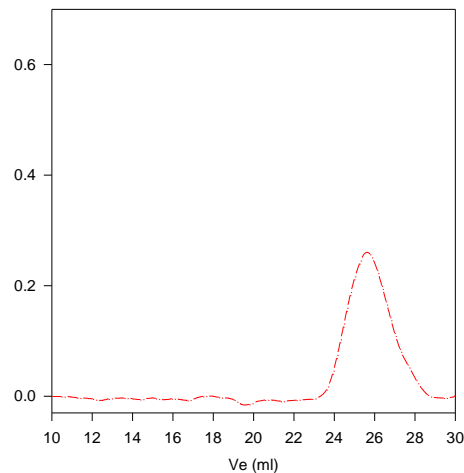
Functionality of the polymer was determined by H NMR analysis. It was found over 90% by comparing CH₂-OCO at 4.3ppm with respect to the siloxane and about 85% with respect to the terminal phenyl group.

Solubility:

Polymer is soluble in CHCl₃, THF. It is precipitated out from cold ethanol, isopropanol.

SEC of Sample:

P8634-DMS2BzCl



Size exclusion chromatography of the polymer

--- Polydimethyl siloxane di benzyl chloride terminated: M_n=4000, M_w=5400, Mw/Mn=1.3

HNMR of the product:

