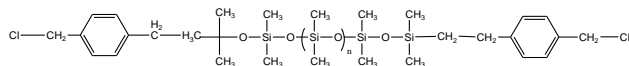


**Sample Name:**  $\alpha$ - $\omega$  dibenzyl chloride terminated Poly(dimethyl siloxane)

**Sample #:** P42779A-DMS2BzCl

### Structure:



### Composition:

Mn x 10 <sup>3</sup>	PDI
1.5	1.24

### Synthesis Procedure:

$\alpha$ - $\omega$  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)<sub>3</sub>N. Polymer was purified after passing through the column packed with silica, eluent CHCl<sub>3</sub>.

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:

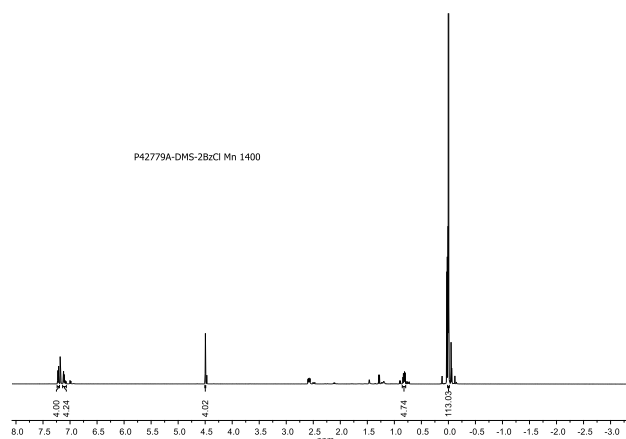
By Size exclusion chromatography (SEC): Varian liquid chromatograph equipped with UV and refractive detector. SEC columns from Supelco were used with THF containing 2 vol% (Et)<sub>3</sub>N as the eluent. The molecular weights were determined using light scattering detector and viscosity detector. The 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 CH<sub>2</sub>-OCO at 4.3ppm with respect to the siloxane and about 85% with respect to the terminal phenyl group.

### Solubility:

Polymer is soluble in CHCl<sub>3</sub>, THF. It is precipitated out from cold ethanol, isopropanol.

### <sup>1</sup>H-NMR spectrum of the product:



### SEC elugram of Sample:

