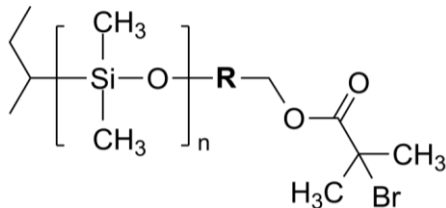


Sample Name:

**Poly(dimethylsiloxane),  $\omega$ -bromo-terminated**

Sample #: **P60598-DMSBr**

**Structure:**



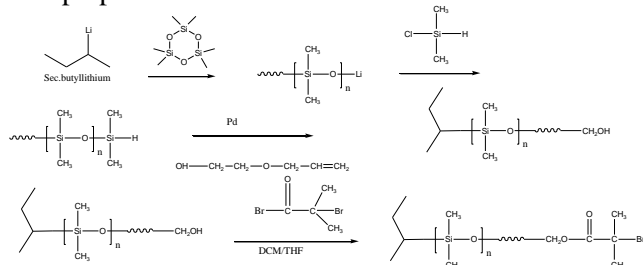
**Composition:**

$M_n \times 10^3$	PDI
10.0	1.10

### Synthesis Procedure:

Bromo terminated poly(dimethyl siloxane) was prepared by living anionic polymerization of hexamethyl cyclotrisiloxane using secondary butyl lithium as initiator termination by dimethyl chlorosilane, followed by modification of the silane end group. For the details see 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.

The following reaction scheme shows how the product was prepared:



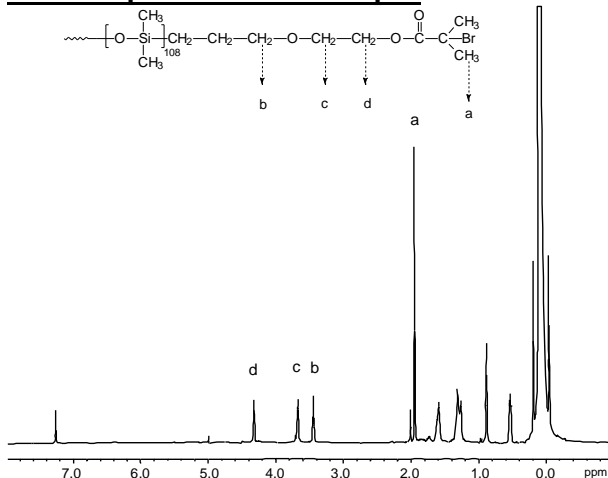
### Characterization:

The molecular weights and the polydispersity index of this polymer was determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

### Solubility:

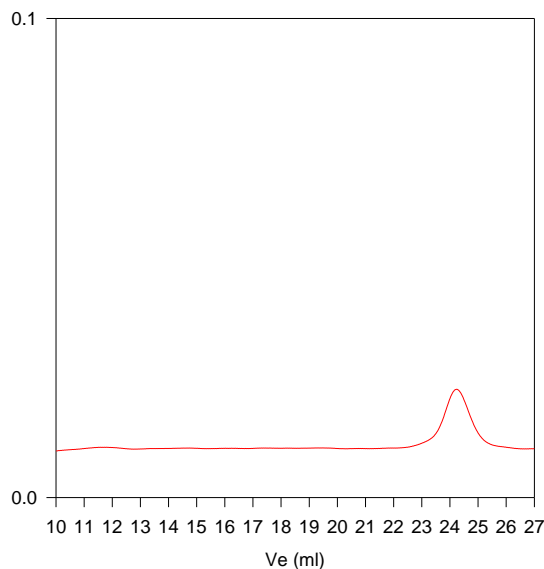
The polymer is soluble in hexane, toluene, cyclohexane, THF and chloroform but precipitates from methanol and ethanol.

### **$^1$ H NMR spectrum of the Sample:**



### **SEC profile of the Sample:**

**P60598-DMSBr**



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

$$M_n=10000, M_w=11000, M_w/M_n=1.10$$