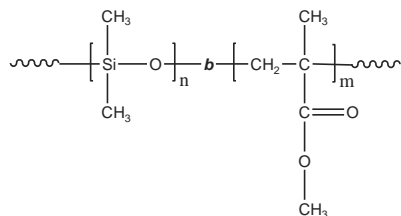


Sample Name: Poly(dimethylsiloxane-b-methyl methacrylate)

Sample #: P2538-DMSMMA

Structure:



Composition:

$M_n \times 10^3$ DMS- MMA	M_w/M_n (PDI)
5.0-b-72.5	1.24

Synthesis Procedure:

The polymer is prepared by living consequent anionic polymerization of methyl methacrylate. Details are available in our published paper: (Ref: Zhang J. & Varshney, S.K., Designed Monomer and Polymers: Vol 5, 1, 79-95, 2002)

Characterization:

An aliquot of the anionic poly(methyl methacrylate) block was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI) before addition of tBuMA. The final block copolymer composition was calculated from $^1\text{H-NMR}$ spectroscopy by comparing the peak area of the dimethyl siloxane protons near 0.08 ppm with the methyl protons of MMA at about 3.6 ppm. Block copolymer PDI is determined by SEC.

Solubility:

The polymer is soluble in THF, CHCl_3 , and DMF, not soluble in methanol, hexane, and ether.

^1H NMR spectrum of the sample:

