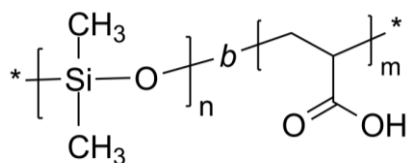


Sample Name: Poly(dimethylsiloxane)-b-poly(acrylic acid)

Sample #: P43384A-DMSAA

Structure:

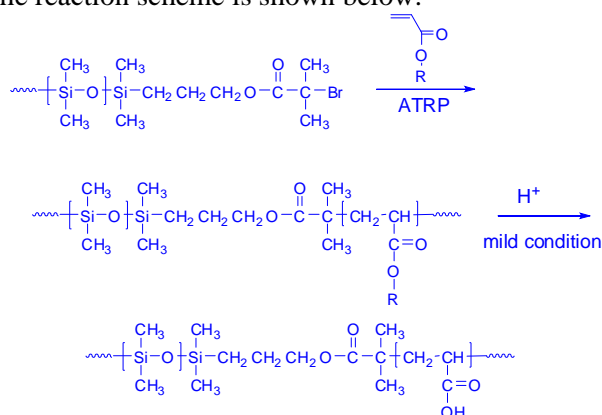


Composition:

Mn × 10 ³ PDMS-b-PAA	PDI
8-b-7.0	1.5

Synthesis Procedure:

The reaction scheme is shown below:



Characterization:

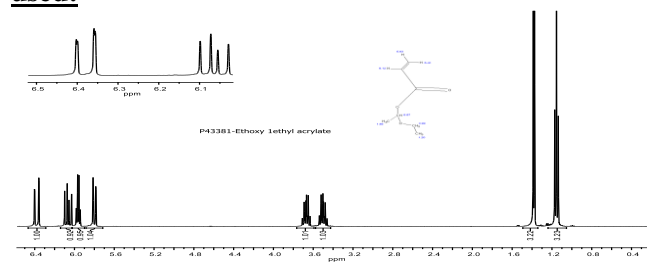
The results from NMR and FTIR are comparable.

Note: The protected polyacrylic acid may cause the SEC profile broadening. We still claim the Mw/Mn as the apparent molecular weight. Real Mw/Mn should be narrower

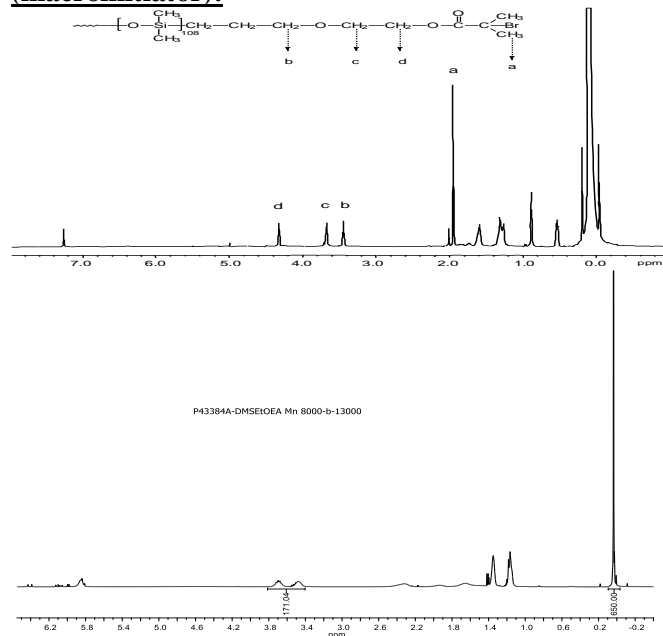
Solubility:

Poly(dimethyl siloxane -b- acrylic acid) is soluble in THF. It is not reprecipitated well in methanol or hexanes because of its amphiphilic characters.

H-NMR Spectrum of the Monomer high purity used:



¹H-NMR Spectrum of the DMS-Br (macroinitiator):



SEC profile of the block copolymer: DMS-b-EtoEA

