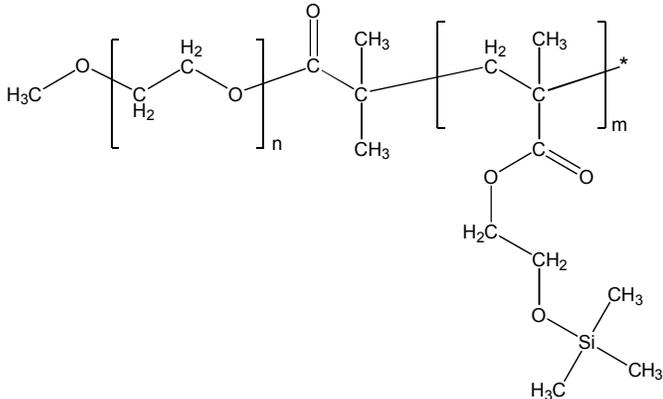


Sample Name:

**Poly(ethylene oxide *-b-* trimethyl siloxy 2-ethyl methacrylate)**

Sample # **P19607-EOHEMATMS**

Structure:



Composition:

Mn x 10 <sup>3</sup> EO- <i>b</i> -HEMATMS	Mw/Mn
2.0- <i>b</i> -4.5	1.19

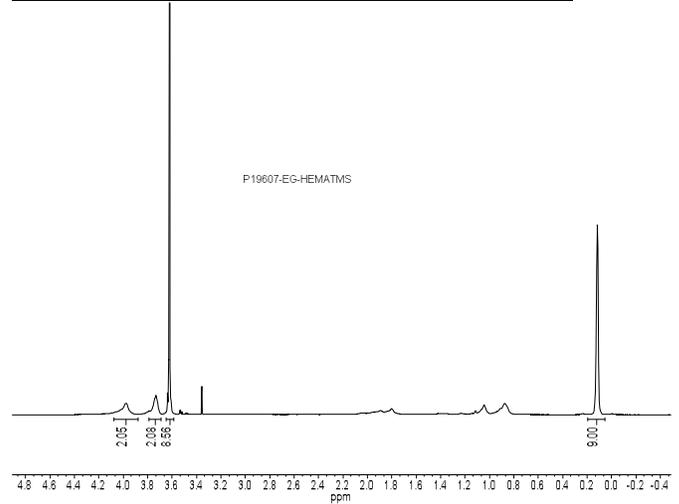
Synthesis procedure:

The EO-HEMATMS diblock copolymer was synthesized by controlled radical process.

Characterization:

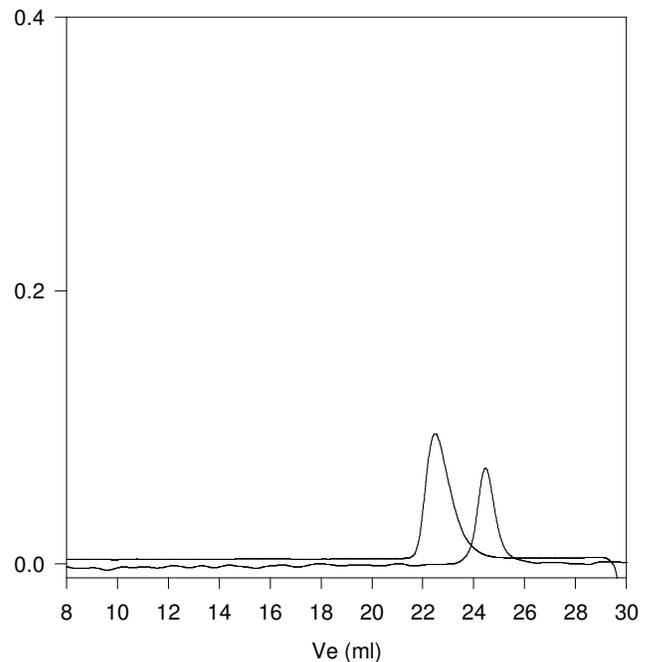
The molecular structure of the polymer was confirmed by <sup>1</sup>H NMR. Molecular weight and polydispersity index of the polymer were determined by size exclusion chromatography (SEC).

**<sup>1</sup>H-NMR spectrum of the diblock copolymer:**



**SEC of PEO (1<sup>st</sup> block) and diblock copolymer:**

**P19607-EOHEMATMS**



Size exclusion chromatography of poly(EO-*b*-MMA)

— PEO, M<sub>n</sub>=2000, M<sub>w</sub>=2160, M<sub>w</sub>/M<sub>n</sub>=1.08

— Poly(ethylene oxide-*b*-HEMATMS)

Mn: PEO(2000)-*b*-HEMATMS(4500) M<sub>w</sub>/M<sub>n</sub>=1.19