

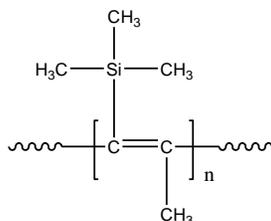
**Sample Name:** Poly[1-(trimethylsilyl)-1-propyne]

**SEC of Homopolymer:**

**Sample #:** P7113-TMSP lot #40770

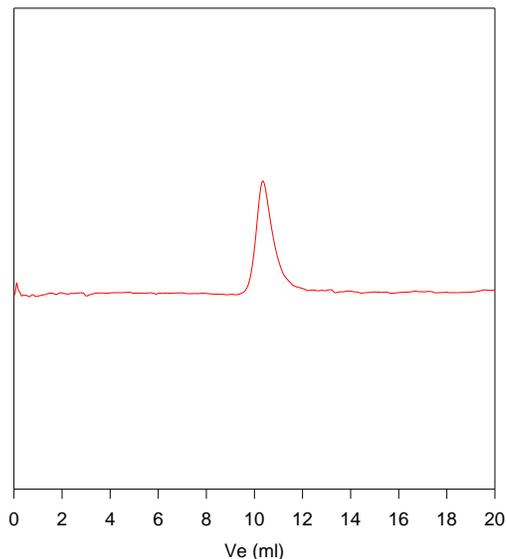
**P7113-TMSP**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	124.0
Mw x 10 <sup>3</sup>	135.2
PDI	1.09

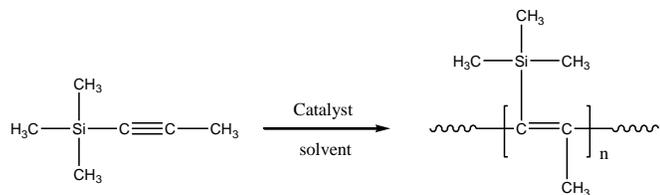


Size exclusion chromatography of poly[1-(trimethylsilyl)-propyne]:

M<sub>n</sub>=124000, M<sub>w</sub>=135200, M<sub>w</sub>/M<sub>n</sub>=1.09

**Synthesis Procedure:**

The polymer is prepared by polymerization of 1-(trimethylsilyl)-1-propyne with TaCl<sub>3</sub> and Ph<sub>3</sub>Sb as the catalyst in toluene at 80°C. The scheme of the reaction is illustrated below. The resulting polymer was precipitated in methanol.



**Characterization:**

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in Chloroform. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive detectors and the molecular weight is calculated based on polystyrene standards.

**Solubility:**

The polymer is soluble in Toluene and CHCl<sub>3</sub>. It precipitates from methanol.