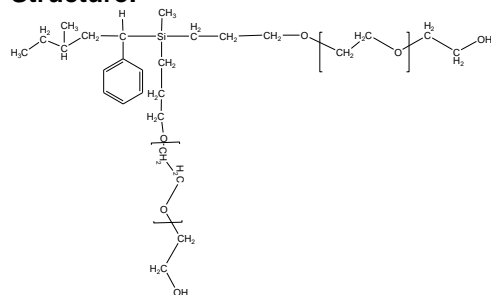


**Sample Name: T –Type architecture of Poly styrene and Poly ethylene oxide**

**Sample #: P3744-TS(EO)2**

**Structure:**

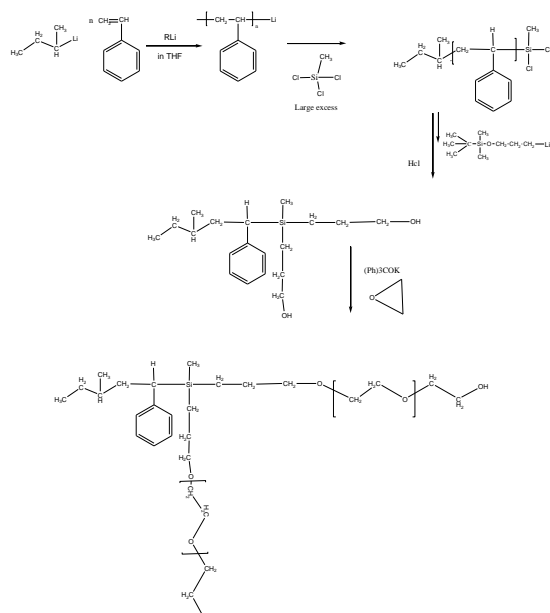


**Composition:**

Mn x 10 <sup>3</sup> PS arm 10.0	1.05
Mn of PEO arm 18.0	-
Total molecular weight: 46.0	1.2

**Synthesis Procedure:**

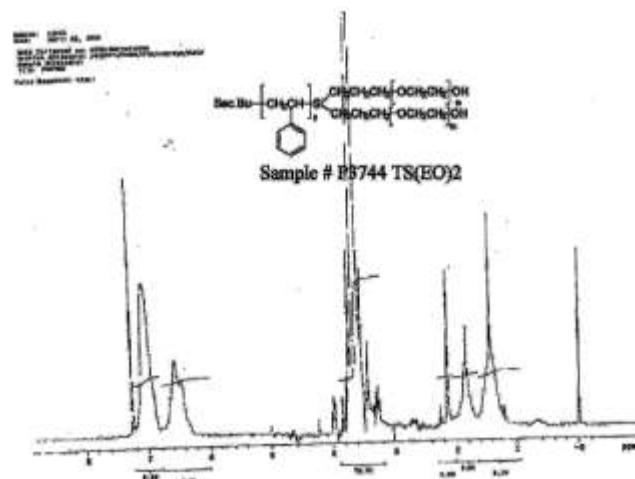
The polymer was synthesized by anionic process polymerization.



**Characterization:**

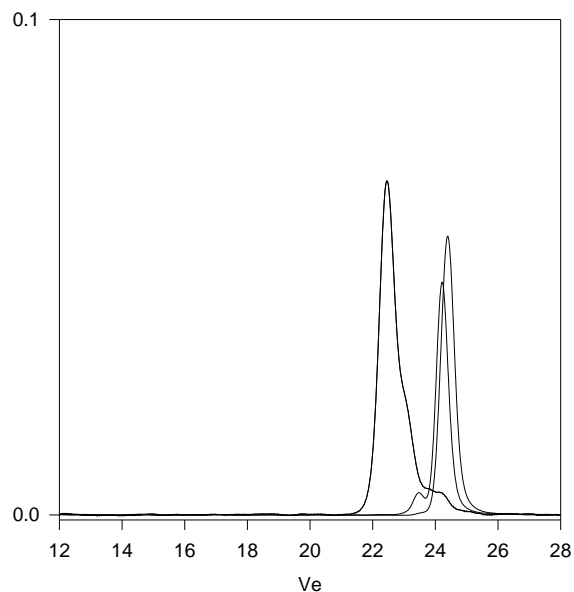
Polymer analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). Compositions was calculated by HNMR.

**<sup>1</sup>H-NMR Spectrum of polymer**



**SEC elugram of the sample**

**P3744-TS(EO)2**



Size Exclusion Chromatography :

- P3744-St, the first PS block (fraction terminated with methanol)  
M<sub>n</sub>=10000, M<sub>w</sub>/M<sub>n</sub>=1.05
  - P3744-S Si(CH<sub>3</sub>)<sub>2</sub>SiCl<sub>2</sub> Polystyrene terminated with large excess of Si(CH<sub>3</sub>)<sub>2</sub>Cl<sub>2</sub> Mn 10100 M<sub>w</sub>/M<sub>n</sub>=1.05
  - P3744 PSt Si(CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub> OH)<sub>2</sub> Mn 10100 M<sub>w</sub>/M<sub>n</sub>=1.05
  - P3744 PSt Si(CH<sub>2</sub>CH<sub>2</sub>O)<sub>2</sub>n T type architecture PSt(EO)<sub>2</sub>n  
Mn:46,000 M<sub>w</sub>/M<sub>n</sub>=1.2
- Viscosity in THF at 30 oC: 0.366 dl/g dn/dc in THF at 30 oC: 0.075  
Radius of Gyration: 8.59 nm