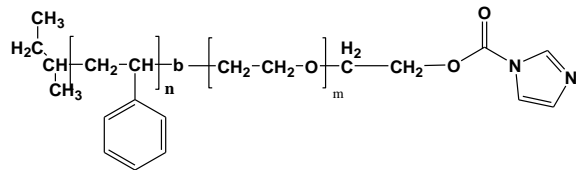


**Sample Name:**  
**Carbonyl imidazole . end functionalized**  
**Poly(styrene-b-ethylene oxide)**

**Sample #:** P40856-SEO-ID

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> S-b-EO-ID	9.5-b-18.0
PDI	1.09
functionality by HNMR	> 98 %

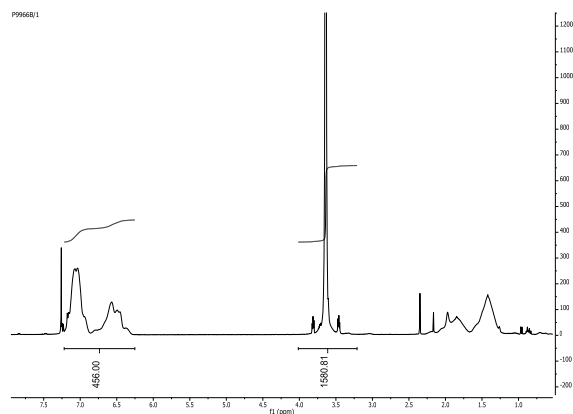
**Synthesis Procedure:**

Carbonyl imidazole . end functionalized Poly (styrene-b-ethylene oxide) is prepared by modification of terminal COOH to react with trans-cyclooctene-PEG<sub>3</sub>-NH<sub>2</sub> moiety.

**Characterization:**

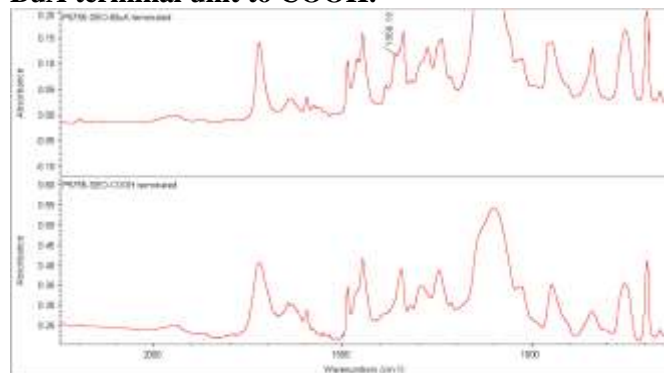
The product was characterized by size exclusion chromatography (SEC) and <sup>1</sup>H NMR.

**HNMR spectrum of diblock SEO:**

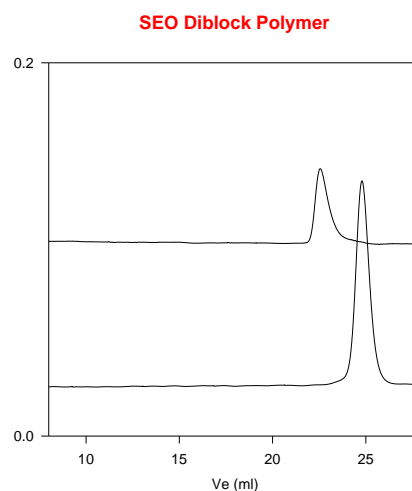


**FTIR of functionalized polymer:**

**Ps-EO-tBuA terminated and after hydrolysis of tert BuA terminal unit to COOH.**



**SEC of the diblock polymer:**



Size Exclusion Chromatography:

— Polystyrene, M<sub>n</sub>=9,500, M<sub>w</sub>=9,900, PI=1.05

— Block Copolymer Polystyrene-b-Poly(ethylene oxide)

Mw: PS(9,500)-b-PEO(18,000), PI=1.09