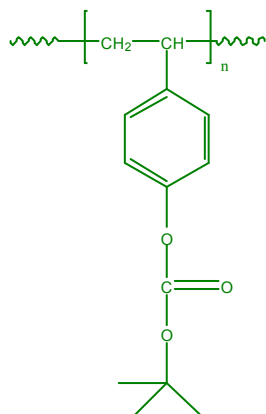


Sample Name:  
**Poly(4-((tert-butoxycarbonyl)oxy)styrene)**

Sample #: **P6419-4BOCS**

**Structure:**

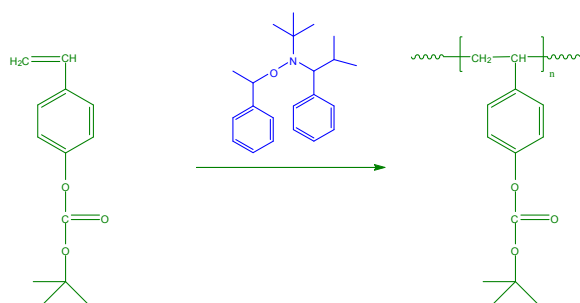


**Composition:**

Mn x 10 <sup>3</sup>	PDI
24.5	13.75 (Bimode)

**Synthesis Procedure:**

Poly(4-((tert-butoxycarbonyl)oxy)styrene) is synthesized by nitroxide mediated free-radical polymerization of 4-((tert-butoxycarbonyl)oxy)styrene and the reaction scheme is shown below.



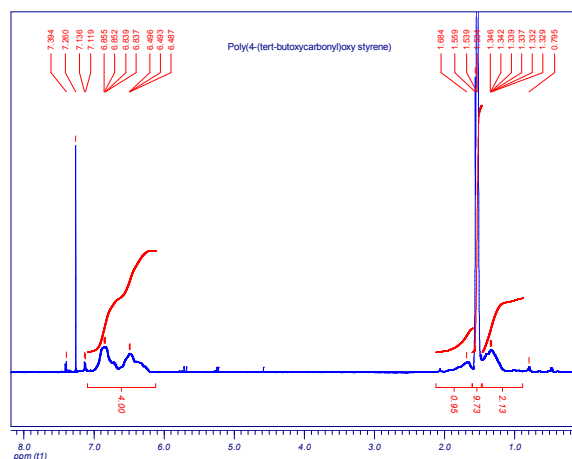
**Characterization:**

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography.

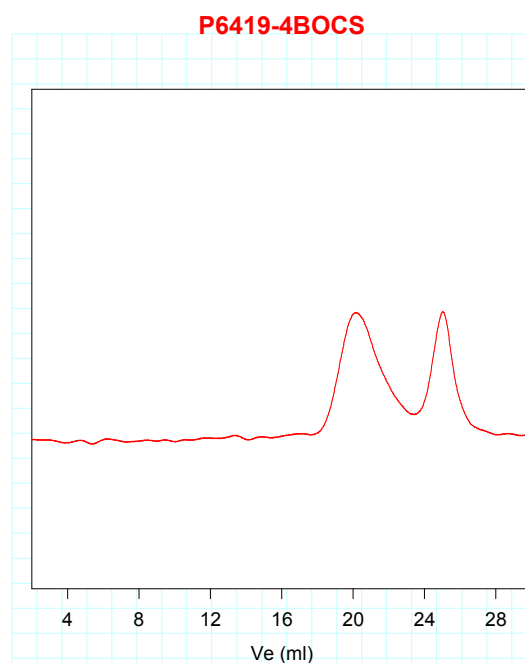
**Solubility:**

Poly(4-Boc-styrene) is soluble in DMF, THF, toluene and CHCl<sub>3</sub>. It precipitates from methanol, ethanol, water and hexanes.

**NMR of Homopolymer:**



**SEC of Homopolymer:**



Size exclusion chromatograph of polymer: poly(4-Boc-styrene):

M<sub>n</sub>=24500, M<sub>w</sub>=336900, M<sub>w</sub>/M<sub>n</sub>=13.75