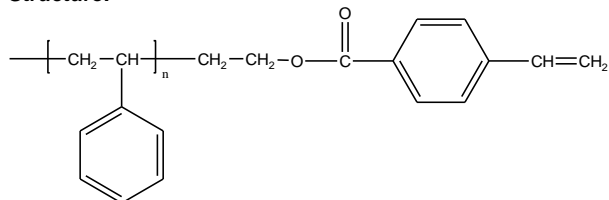


**Sample Name:**  
**Vinyl Terminated Polystyrene**

**Sample #:** P7587-SVinyl

**Structure:**

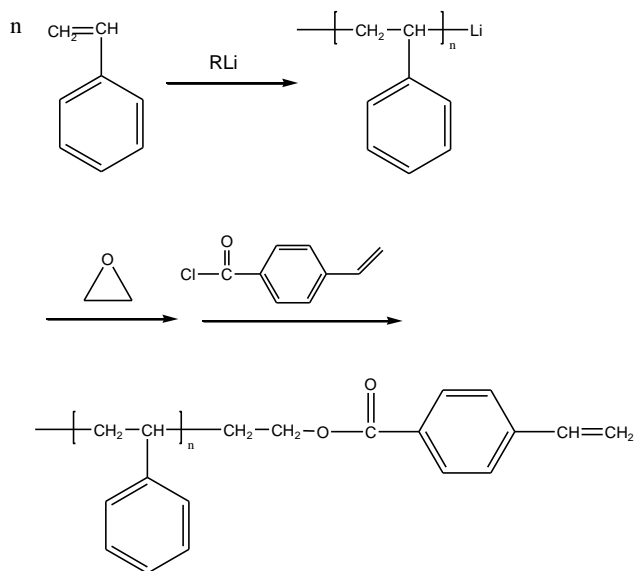


**Composition:**

Mn x 10 <sup>3</sup>	Functionality	PDI
1.1	>90%	1.12

**Synthesis Procedure:**

Vinyl Terminated Polystyrene was prepared by anionic living polymerization of styrene, following by termination with ethylene oxide and 4-vinyl benzoyl chloride. The scheme of the reaction is illustrated below:



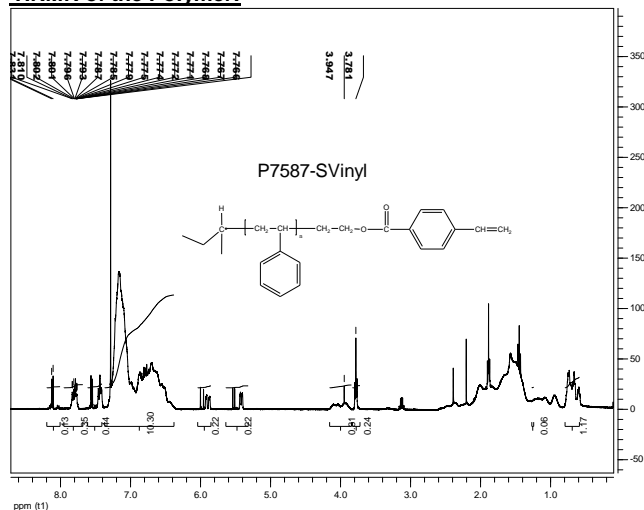
**Characterization:**

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was verified by proton NMR.

**Solubility:**

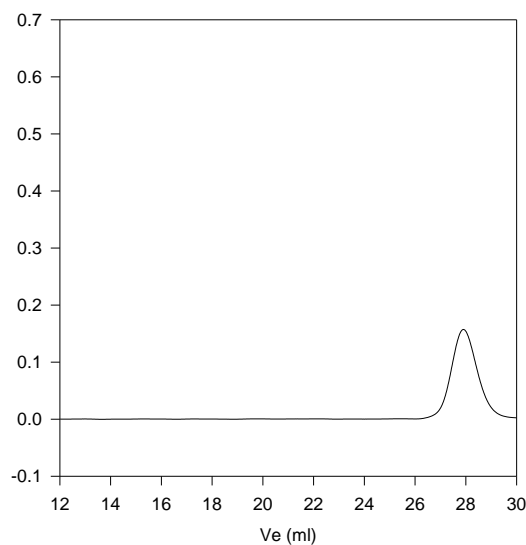
Polymer is soluble in THF, CHCl<sub>3</sub>, dioxane, toluene.

**HNMR of the Polymer:**



**SEC of Sample:**

**P7587-SVinyl**



Size exclusion chromatograph of Vinyl terminated (styrenic double bond) polystyrene:  
M<sub>n</sub>=1100, M<sub>w</sub>=1250, PI=1.12 Functionality: Over 90%