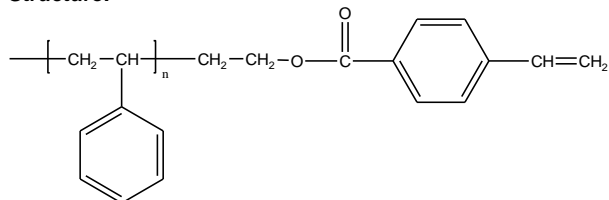


**Sample Name:**  
**Vinyl Terminated Polystyrene**

**Sample #:** P7588-SVinyl

**Structure:**

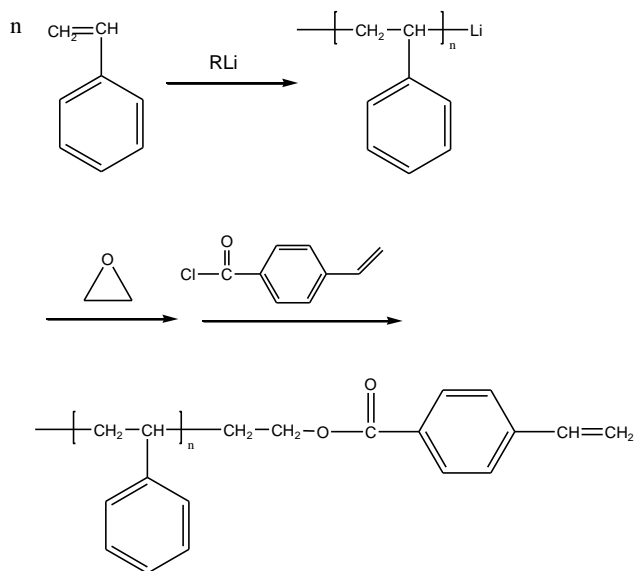


**Composition:**

Mn x 10 <sup>3</sup>	Functionality	PDI
2.4	>90%	1.09

**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:



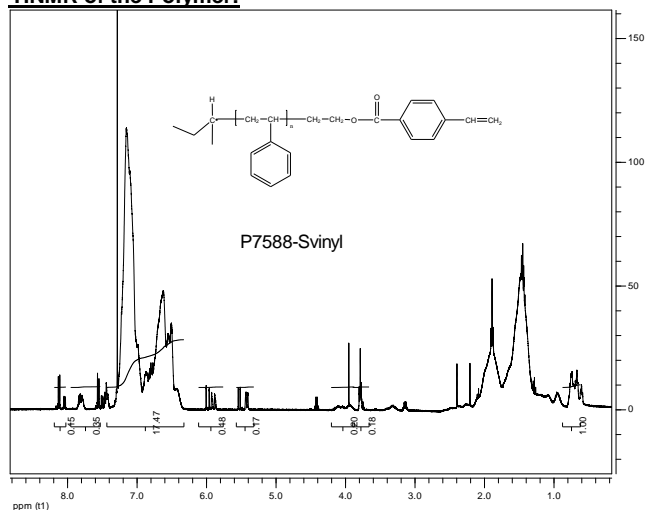
**Characterization:**

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:**

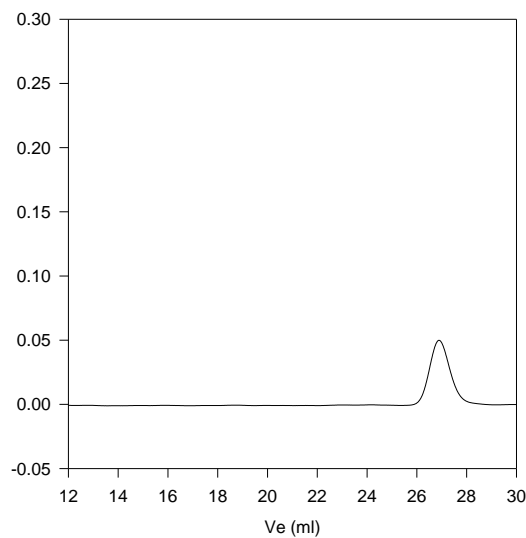
Polymer is soluble in THF, CHCL3, dioxane, toluene.

**HNMR of the Polymer:**



**SEC of Sample:**

**P7588-SVinyl**



Size exclusion chromatograph of Vinyl terminated (styrenic double bond) polystyrene:  
 $M_n=2400$ ,  $M_w=2600$ ,  $PI=1.09$  Functionality: Over 90%