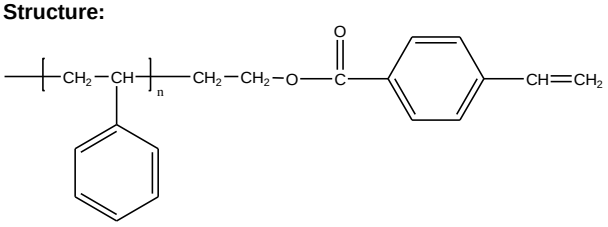
Sample Name:
Vinyl Terminated Polystyrene

Sample #: **P7592-SVinyl**

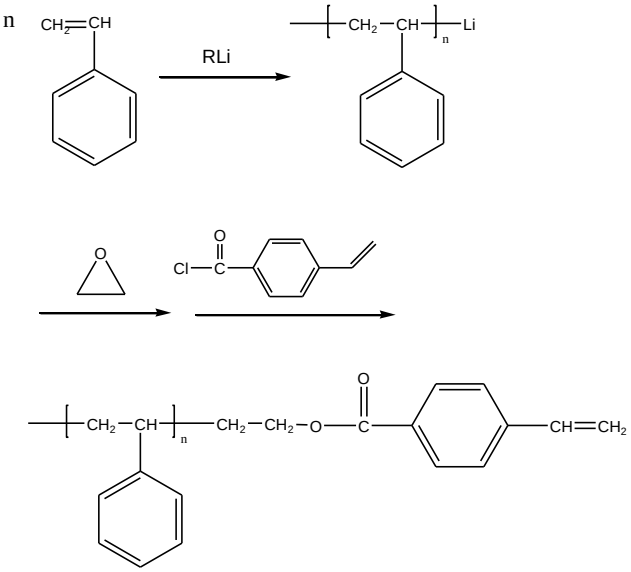
Structure:



Composition:

Mn x 10^3	Functionality	PDI
10.0	>40%	1.08

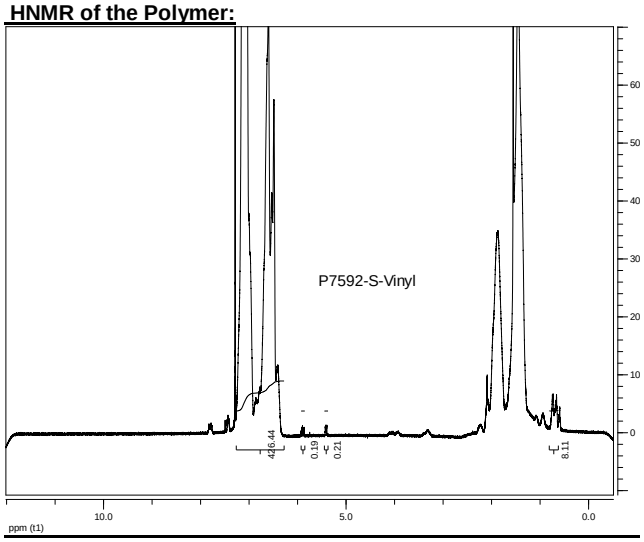
Synthesis Procedure:
Vinyl Terminated Polystyrene was prepared by anionic living polymerization of styrene, following by termination with ethylene oxide and 4-vinyl benzoyl chloride. The scheme of the reaction is illustrated below:



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.

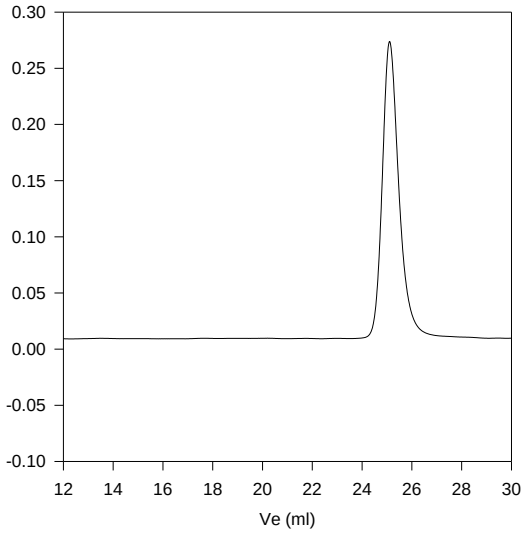
Solubility:
Polymer is soluble in THF, CHCL3, dioxane, toluene.

HNMR of the Polymer:



SEC of Sample:

P7592-SVinyl



Size exclusion chromatograph of Vinyl terminated (styrenic double bond) polystyrene:
M_n=10000, M_w=10800, PI=1.08 Functionality: around 40%