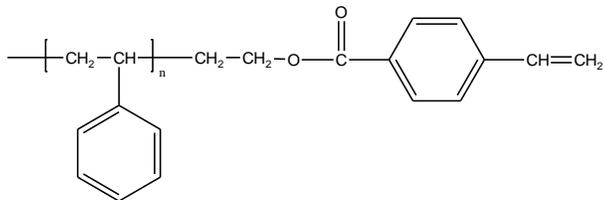


Sample Name:

## Vinyl Terminated Polystyrene

Sample #: P2033-SVinyl

Structure:

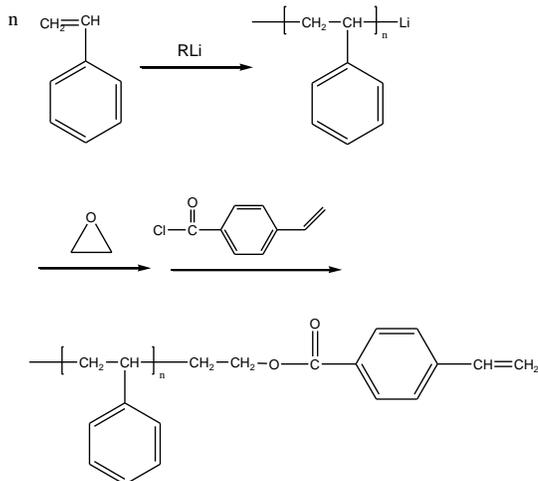


Composition:

$M_n \times 10^3$	Functionality	PDI
19.1	>90%	1.03

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:

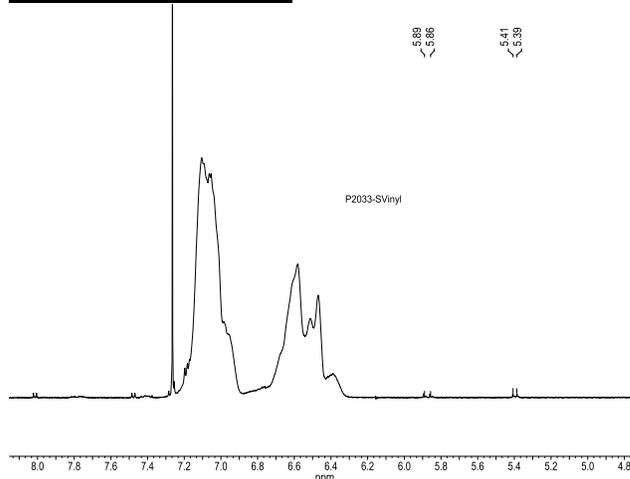


Characterization:

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.

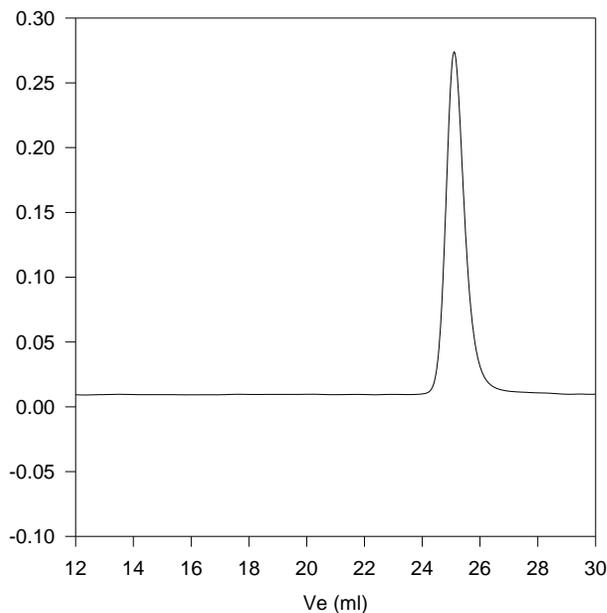
Solubility: Polymer is soluble in THF,  $CHCl_3$ , dioxane, toluene.

HNMR of the Polymer



SEC of Sample:

**P2033-SVinyl**



Size exclusion chromatograph of Vinyl terminated polystyrene:

$M_n=19100$ ,  $M_w=19600$ ,  $PI=1.03$