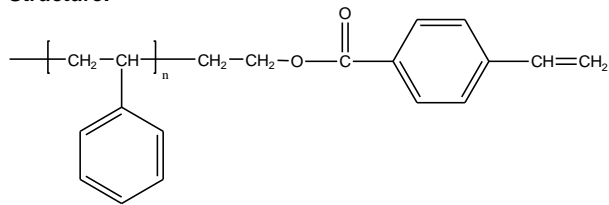


Sample Name:
Vinyl Terminated Polystyrene

Sample #: **P6665-SVinyl**

Structure:

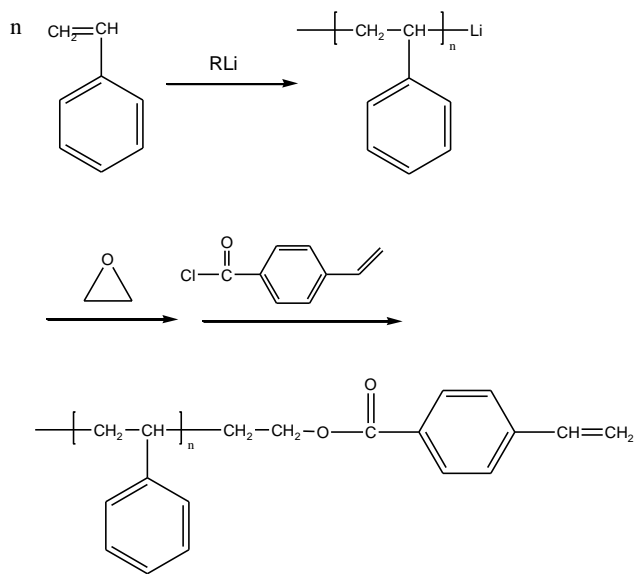


Composition:

Mn x 10 ³	Functionality	PDI
1.7	>95%	1.14

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:

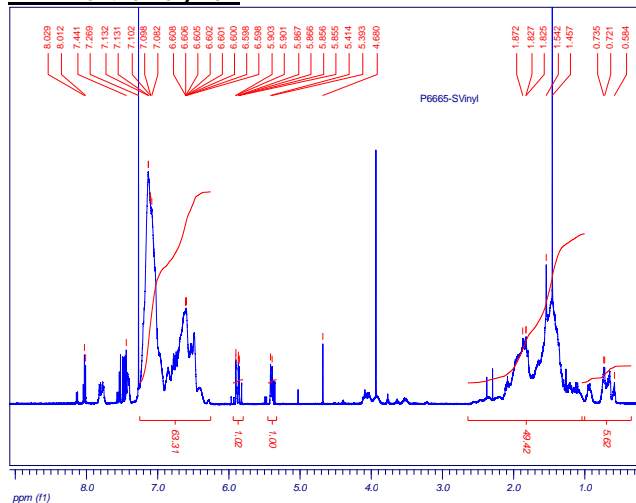


Characterization:

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.

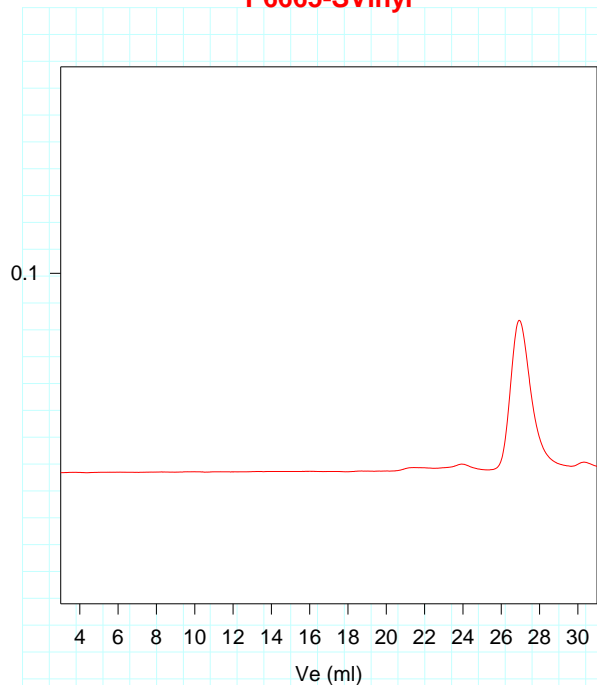
Solubility: Polymer is soluble in THF, CHCl₃, dioxane, toluene.

HNMR of the Polymer:



SEC of Sample:

P6665-SVinyl



Size exclusion chromatography of ω Vinyl Terminated polystyrene:

$M_n=1700$, $M_w=1900$, $PI=1.14$, functionality>95%