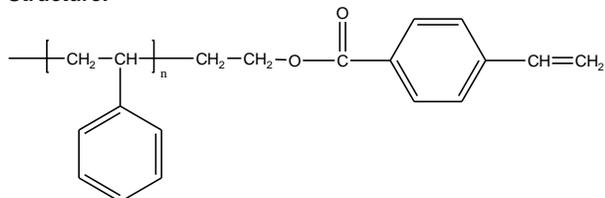


Sample Name:
Vinyl Terminated Polystyrene

Sample #: P7587-SVinyl

Structure:

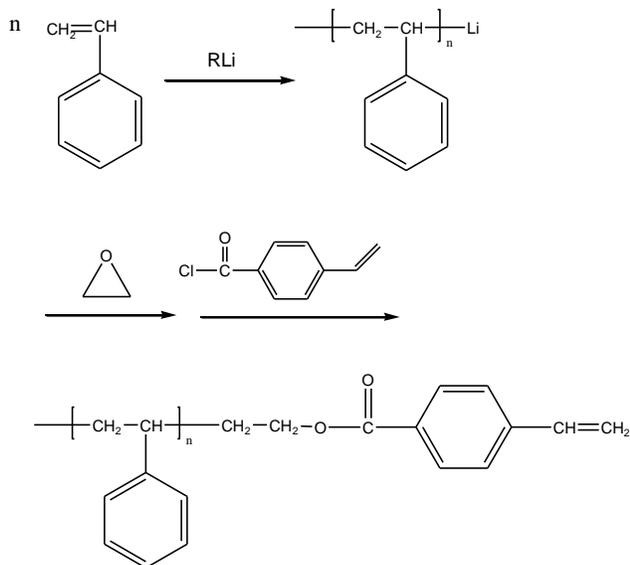


Composition:

Mn x 10 ³	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:



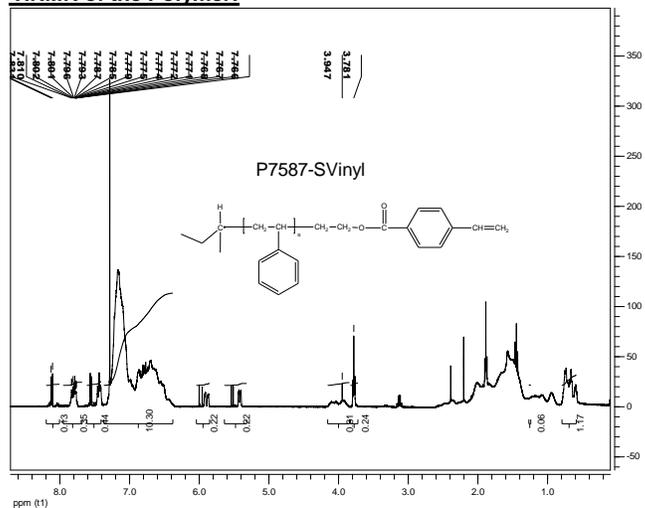
Characterization:

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:

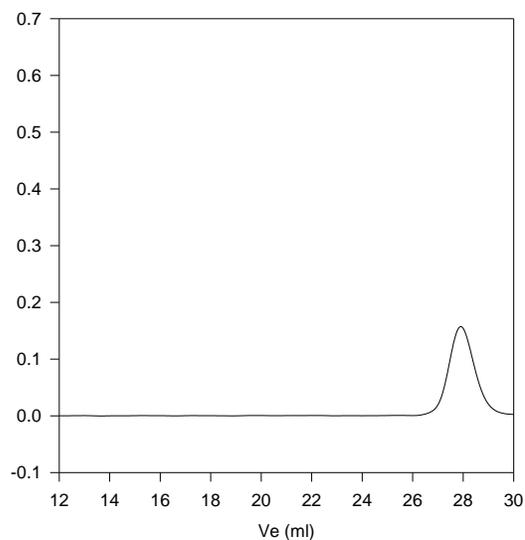
Polymer is soluble in THF, CHCl₃, dioxane, toluene.

HNMR of the Polymer:



SEC of Sample:

P7587-SVinyl



Size exclusion chromatograph of Vinyl terminated (styrenic double bond) polystyrene:

M_n=1100, M_w=1250, PI=1.12 Functionality: Over 90%