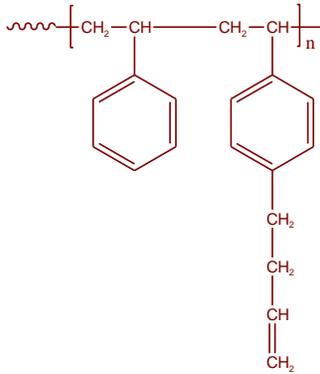


Sample Name: Poly(styrene-co-4-[1-butene]-styrene), random

Sample #: P41465C-SSbutene

Structure:

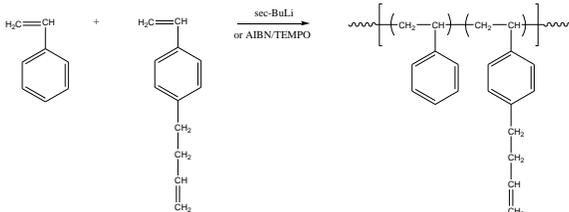


Composition:

Mn x 10 ³	Double Bond mol%	Mw/Mn (Total)
16.5	9.0	1.37

Synthesis Procedure:

Polystyrene-g-1-butene is synthesized by copolymerization of styrene and 4-butene styrene. The brief synthetic route is illustrated as following scheme.



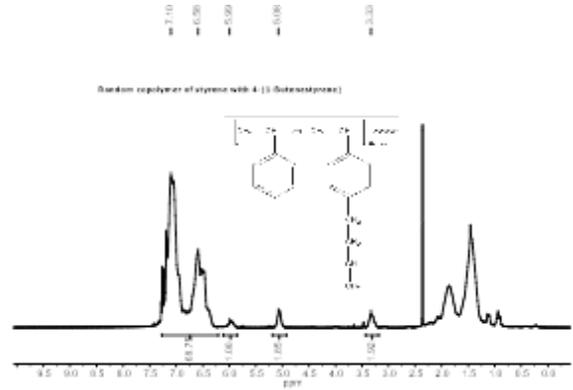
Characterization:

The molecular weight and polydispersity index (PDI) of polymers are obtained by size exclusion chromatography. The composition of grafting polymer is determined by NMR.

Solubility:

Polystyrene-g-butene is soluble in THF, DMF, chloroform, and Toluene. It precipitates from hexanes or methanol.

H NMR spectrum of the Polymer:



SEC elugram of Polymer:

Agilent GPC/SEC Software

