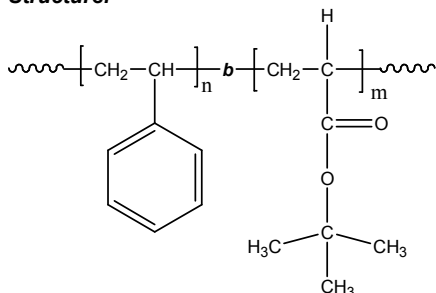


Sample Name: Poly(styrene-b- tert.butylacrylate)

Sample #: P8295-StBuA

Structure:

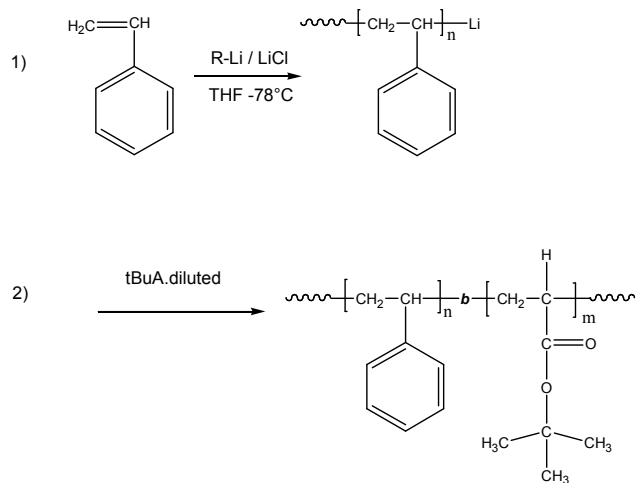


Composition:

Mn x 10 ³ S-b-tBuA	PDI
45.0-b-63.0	1.09

Synthesis Procedure:

Poly(styrene-b-tert.acrylate) is prepared by living anionic polymerization in THF at -78 °C using sec.BuLi initiator adduct with α -methyl styrene in the presence of LiCl. tert.butyl acrylate (tBuA) monomer was added after dilution in THF. For further details please see our published articles.¹⁻⁵ The scheme of the reaction is illustrated below:



Characterization:

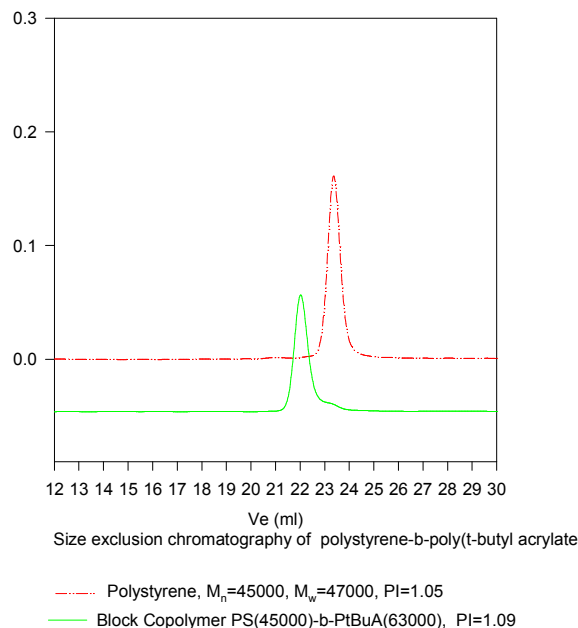
An aliquot of the anionic polystyrene block was terminated before addition of tBuA and analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from ¹H-NMR. Copolymer Mw/Mn is determined by SEC.

Solubility:

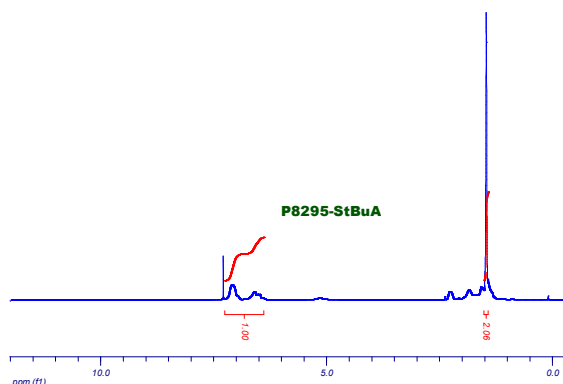
Poly(styrene-b-tert.butylacrylate) is soluble in THF, toluene, dioxane and CHCl₃. This polymer readily precipitates from methanol, ethanol, hexanes and water.

SEC of Sample :

P8295-StBuA



HNMR of the Polymer:



References for further information:

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