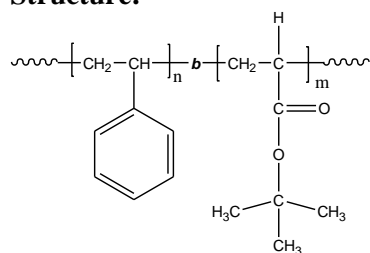


**Sample Name:** Poly (styrene-b- tert.butylacrylate)

**Sample #:** P41374-StBuA

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> S-b-tBuA	PDI
275.0-b-150.0	1.03

**Synthesis Procedure:**

Poly (styrene-b-tert.butyl acrylate) is prepared by living anionic polymerization in THF at -78 °C using sec.BuLi initiator adduct with  $\alpha$ -methyl styrene in the presence of LiCl. For further details please see our published articles.<sup>1-3</sup>

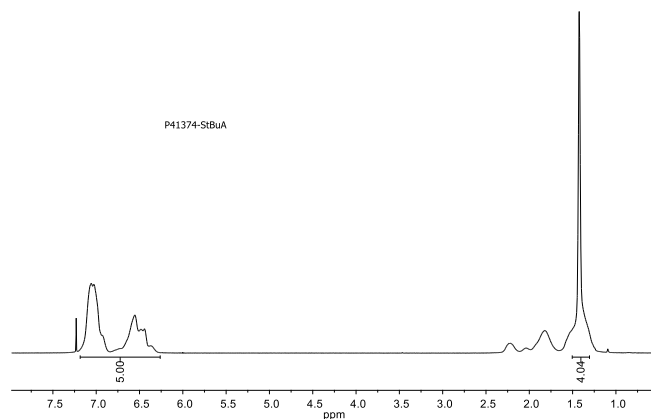
**Characterization:**

The product was characterized by size exclusion chromatography (SEC) and <sup>1</sup>H NMR.

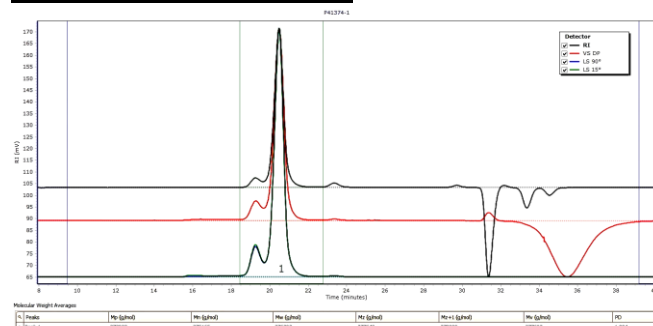
**Solubility:**

Poly (styrene-b-tert.butylacrylate) is soluble in THF, toluene, dioxane and CHCl<sub>3</sub>.

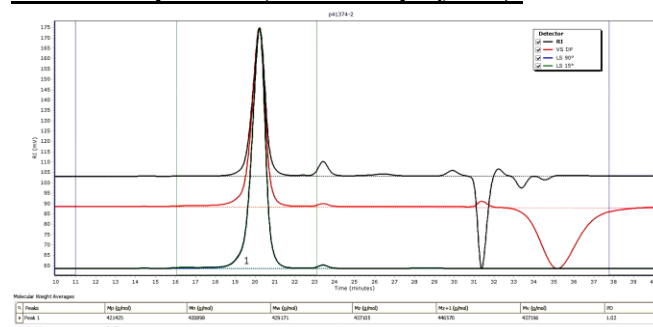
**<sup>1</sup>H NMR spectrum of the PS-b-tBuA:**



**SEC of the first (PS) block:**



**SEC of the product (diblock copolymer):**



**References for further information:**

1. S. K. Varshney, R. Fayt, Ph. Teyssie, and J.P. Hautekeer US Patent 5,264,527 (1993)
2. Ph. Teyssie, R. Fayt, **S. K. Varshney**, and C. Jacobs Eur. Pat. Appl., Jan 16, 1991 *Eur.Pat.408420*  
*Patent Assignees- Atochem S.A France. CA. Vol 114, 26, 247998.* "Star Block Copolymers based on Acrylates and Methacrylates and their Manufacture process".