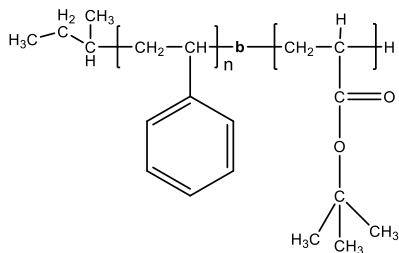


**Sample Name:** Poly (styrene-b- t.butylacrylate)

**Sample #:** P43543A-StBuA

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> S-b-tBuA	PDI
12.7-b-0.8	1.25
Dp (S-b-tBuA): (128-b-6)	

**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>

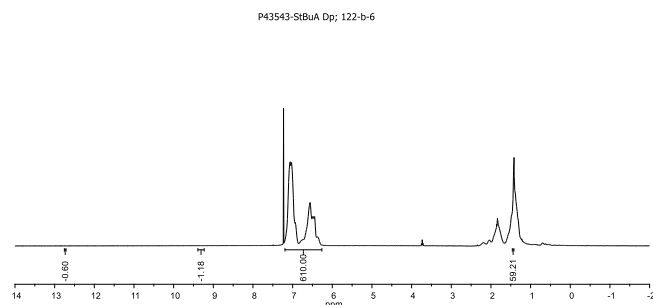
**Characterization:**

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

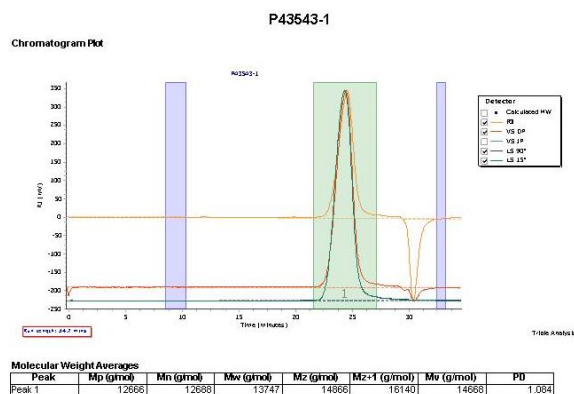
**Solubility:**

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

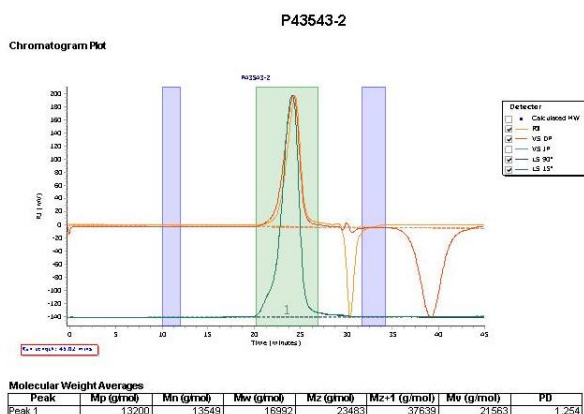
**<sup>1</sup>H-NMR spectrum of the PS-b-tBuA:**



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



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



**References for further information:**

1. Ph.Teyssie, R. Fayt, and S. K. Varshney, *Eur. Pat. Appl. Dec. 12, 1990. Eur. Pat.402204* Patent Assignees-Norsolor S.A. France. CA Vol 114, 20, 186314."Catalyst for the the Anionic Living Polymerization (Meth)acrylates".
2. Xing Fu. Zhong, S. K.Varshney, and A. Eisenberg "Critical Micellization Length for Polystyrene-b-Na-Acrylate Block Ionomers" CA Vol 117, 26, 252280 Macromolecules 1992, 25, 7160-7167.