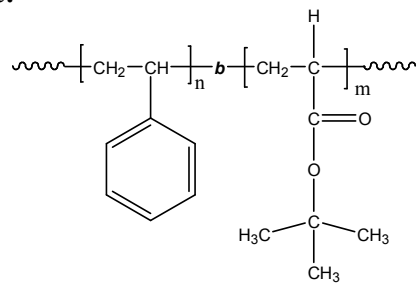


Sample Name: Poly (styrene-b- tert.butyl acrylate)

Sample #: P40245-StBuA

Structure:



Composition:

Mn x 10 ³ S-b-tBuA	PDI
61.5-b-9.0	1.04

Synthesis Procedure:

The polymer was synthesized by anionic process.

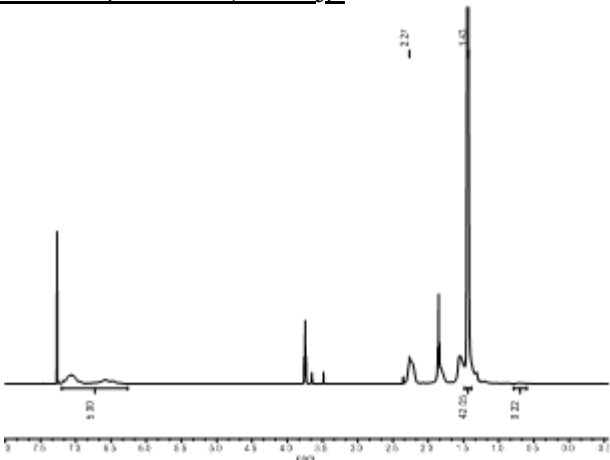
Characterization:

The polymer was characterized by ¹H NMR, SEC, and FTIR.

Solubility:

Poly (styrene-b-tert.butylacrylate) is soluble in THF, toluene, dioxane and CHCl₃.

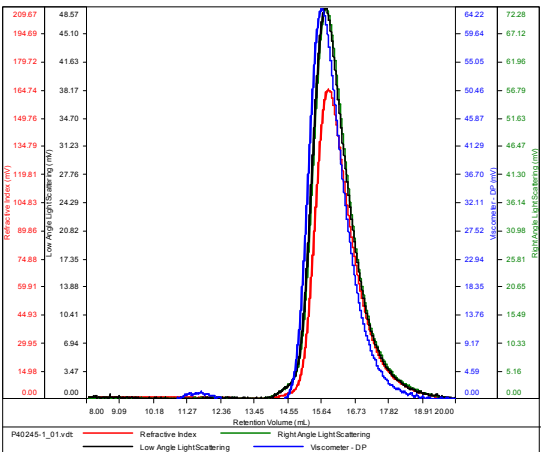
¹H NMR (500 MHz, CDCl₃):



SEC of polystyrene block:

P40245-1

Conc (mg/mL)	4.1693
dn/dc (mL/g)	0.1650
Method	PS80k-October192016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS

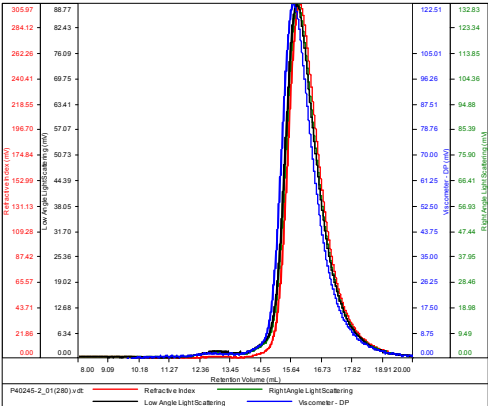


Sample	Mn	Mw	Mp	Mw/Mn	IV
P40245-1_01.vdt	61,246	62,930	61,757	1.028	0.2382

SEC of diblock copolymer:

P40245-StBuA

Conc (mg/mL)	9.0091
dn/dc (mL/g)	0.1420
Method	PS80k-October192016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40245-2_01(280).vdt	70,417	72,961	70,949	1.036	0.2239

References:

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".
3. 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".