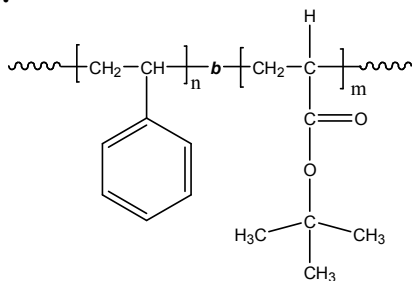


Sample Name: **Poly (styrene-b- tert.butyl acrylate)**

Sample #: **P40285-StBuA**

Structure:



Composition:

Mn x 10 ³ S-b-tBuA	PDI
62.0-b-32.0	1.03

Synthesis Procedure:

The polymer was synthesized by anionic process.

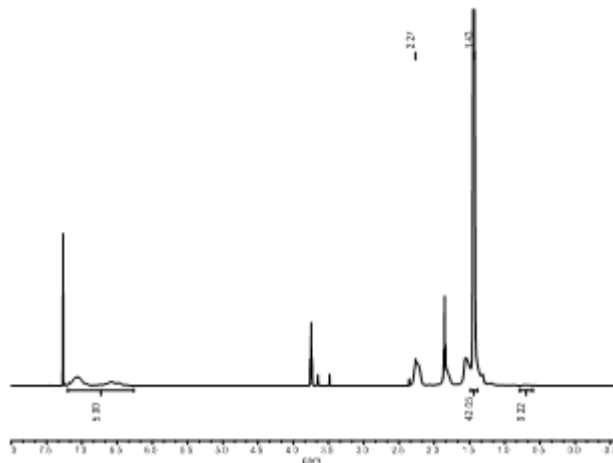
Characterization:

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

Solubility:

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

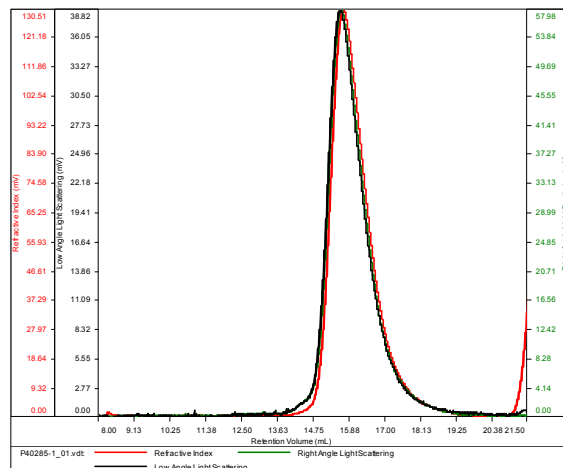
¹H NMR (500 MHz, CDCl₃):



SEC of polystyrene block:

P40285-1

Conc (mg/mL)	3.0678
dn/dc (mL/g)	0.1600
Method	PS80k-October192016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS

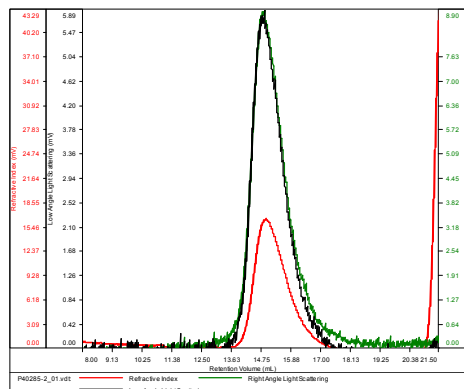


Sample	Mn	Mw	Mp	Mw/Mn	IV
P40285-1_01.vdt	61,727	62,848	61,228	1.018	0.2442

SEC of diblock copolymer:

P40285-StBuA

Conc (mg/mL)	0.5194
dn/dc (mL/g)	0.1300
Method	PS80k-October192016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40285-2_01.vdt	93,925	96,841	90,013	1.031	0.3423

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"

(v. R-01)