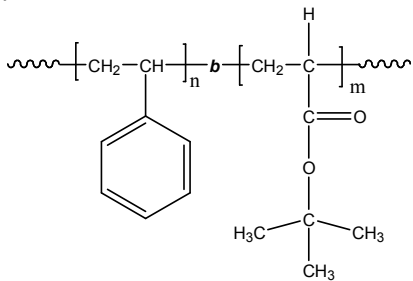


Sample Name: Poly (styrene-b- tert.butyl acrylate)

Sample #: P40283-StBuA

Structure:



Composition:

Mn x 10 <sup>3</sup> S-b-tBuA	PDI
47.0-b-19.0	1.03

Synthesis Procedure:

The polymer was synthesized by anionic process.

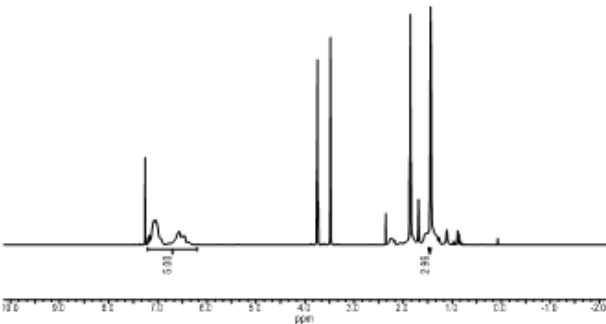
Characterization:

The polymer was characterized by <sup>1</sup>H NMR, SEC, and FTIR.

Solubility:

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

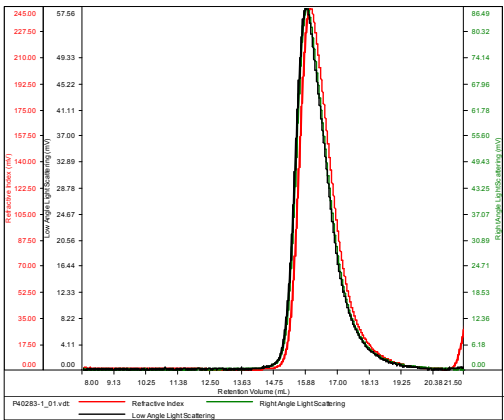
<sup>1</sup>H NMR (500 MHz, CDCl<sub>3</sub>):



SEC of polystyrene block:

P40283-1

Conc (mg/mL)	12.3112
dn/dc (mL/g)	0.1650
Method	PS80k_December2016-0004.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS

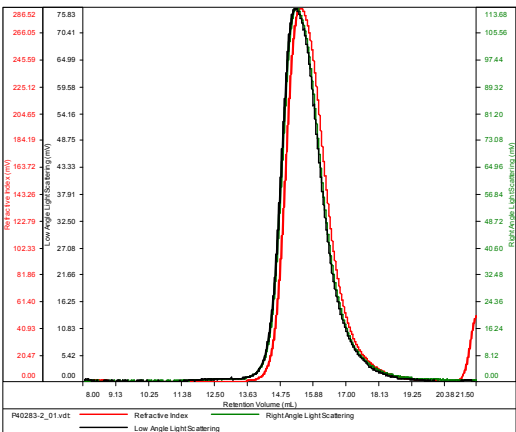


Sample	Mn	Mw	Mp	Mw/Mn	IV
P40283-1_01.vdt	46,914	48,594	46,417	1.036	0.1057

SEC of diblock copolymer:

P40283-StBuA

Conc (mg/mL)	20.9932
dn/dc (mL/g)	0.1350
Method	PS80k_December2016-0004.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40283-2_01.vdt	65,783	68,060	66,628	1.035	0.1570

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".