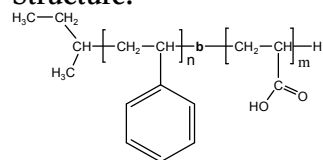


Sample Name: Poly (styrene -b- acrylic acid)

Sample #: P19510-SAA

Structure:



Composition:

Mn x 10 ³ PS-b-PAA	PDI
3.0-B-8.5	3.0
Dp: 29-b-115	

Synthesis Procedure:

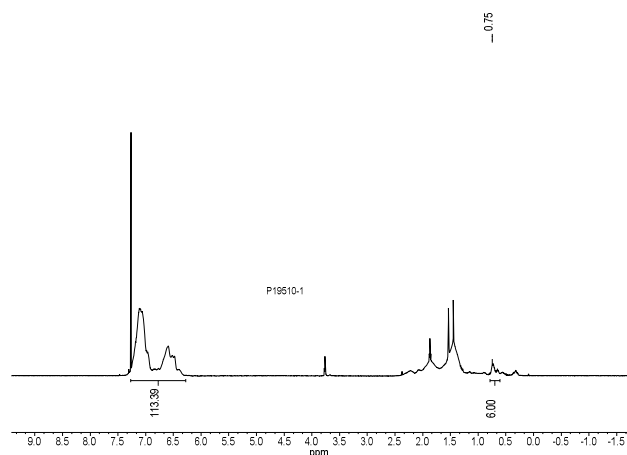
Poly (styrene-b-acrylic acid) is prepared by living anionic polymerization with sequence addition of styrene followed by t-butyl acrylate and hydrolysis of the t-butyl group.

Characterization:

By HNMR. SEC and by FTIR.

Solubility: Polymer must be soluble in THF if not than it has been cross linked due to the formation of inter molecular anhydride formation.

¹H NMR for the polymer:

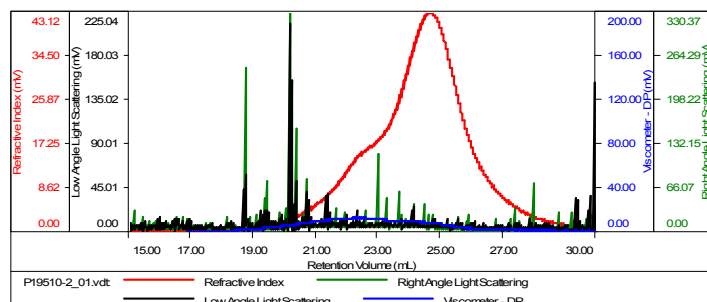


References for further information:

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".
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".

Sample IDP19510-StBuA

Concentration (mg/mL)	1.1295
Sample dn/dc (mL/g)	0.1100
Method File	PS80K-June30-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19510-2_01.vdt	14,634	45,219	10,364	3.080	1.1529