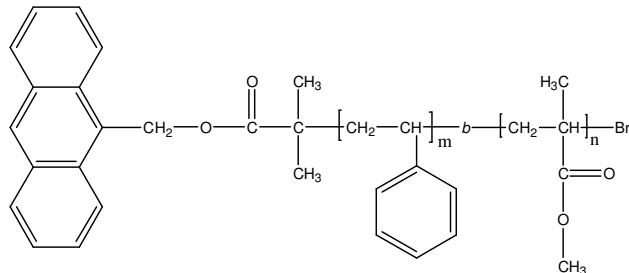


Sample Name: α -Anthracene Terminated Poly(styrene-*b*-methyl methacrylate) Diblock Copolymer

Sample #: P14973-An-SMMA

Structure:

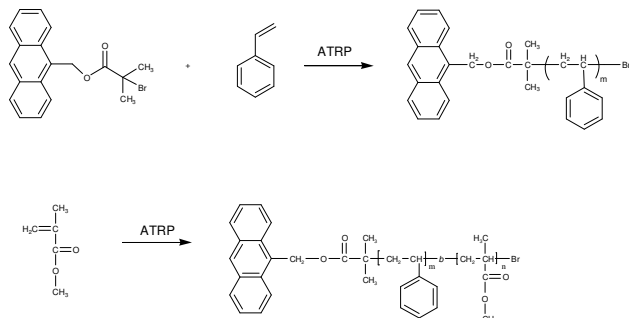


Composition:

$M_n \times 10^3$	PDI
An-S-MMA	
5.5-b-18.0	1.4

Synthesis Procedure:

Anthracene terminated poly(styrene-*b*-methyl methacrylate) diblock copolymer was synthesized by using ATRP polymerization with sequence addition of styrene followed by methyl methacrylate using an anthracene-containing initiator, 9-anthracenemethyl-2-bromoisobutyrate. The polymer was obtained by precipitating into methanol.



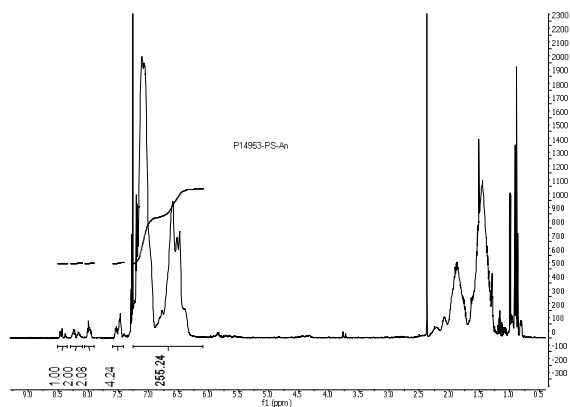
Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a light scattering and refractive index detector.

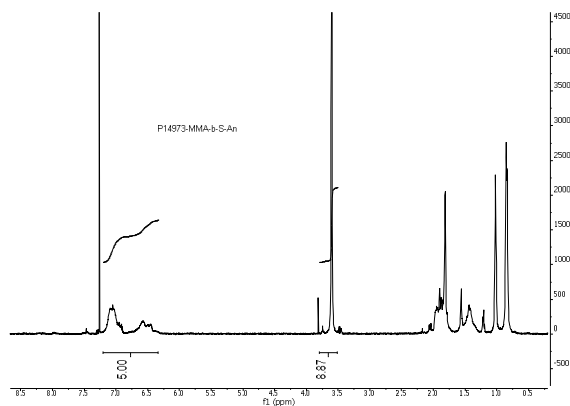
Solubility:

Polymer is soluble in THF, toluene and CHCl_3 . It precipitates from methanol, ethanol, water and hexanes.

^1H NMR of the first polystyrene block:

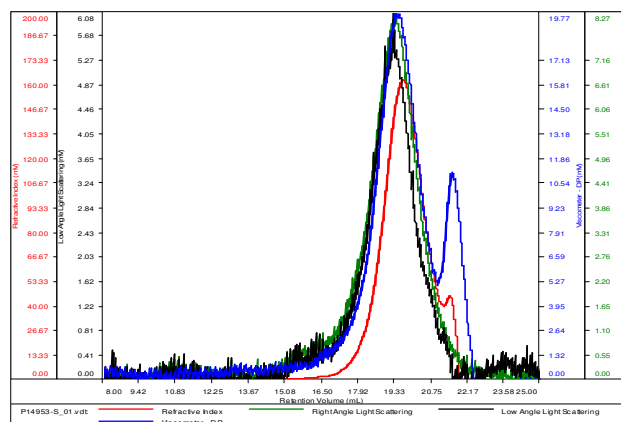


^1H NMR spectrum of the block copolymer MMAS-An:



SEC elugram of the first polystyrene block:
SAMPLE ID: P14953-S

Conc (mg/mL)	6.9816
dn/dc (mL/g)	0.1650
Method	ps80k-21Jan2016: DMF-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS

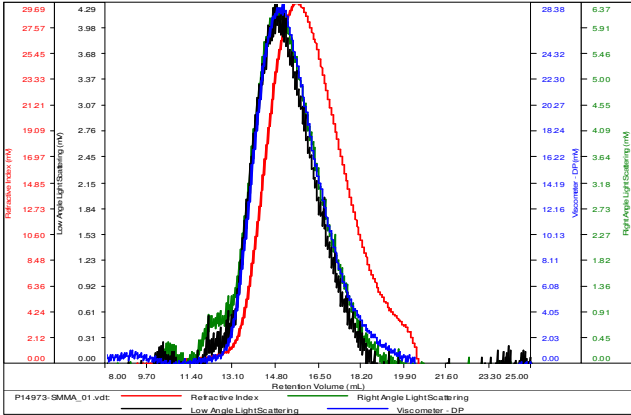


Sample	Mn	Mw	Mp	Mw/Mn	IV
P14953-S_01.vdt	5,641	6,673	5,363	1.183	0.0634

SEC of the block copolymer MMAS-An:

SAMPLE ID: P14973

Conc (mg/mL)	3.4284
dn/dc (mL/g)	0.1100
Method	pe80k-21Jan2016-DMF-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P14973-SMMA_01.vdt	23,593	32,480	31,198	1.377	0.2594