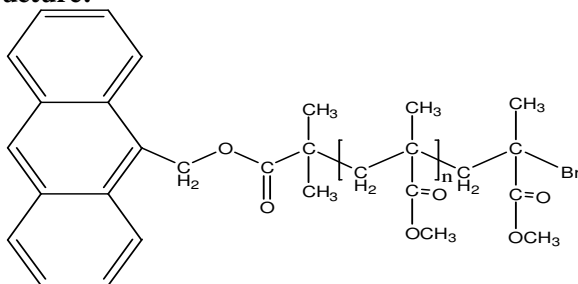


Sample Name: Anthracene Terminated
Poly(methyl methacrylate)

Sample #: P14939-MMA-An

Structure:



Composition:

Mn x 10 ³	PDI
4.0	1.23

Synthesis Procedure:

Anthracene ended polymethyl methacrylate is prepared via atom transfer radical polymerization of methyl methacrylate using an anthracene-containing initiator, 9-anthracenemethyl-2-2-bromoisobutyrate.

Characterization:

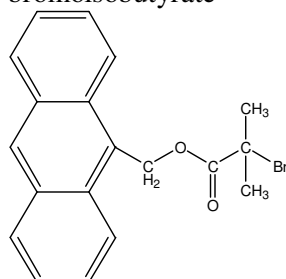
The polymer was characterized by ¹H NMR and SEC. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

Functionality: functionality of the obtained polymer was determined by proton NMR.

Solubility:

Vinyl terminated PMMA is soluble in DMF, THF, toluene, and CHCl₃. It precipitates from methanol, hexane, water.

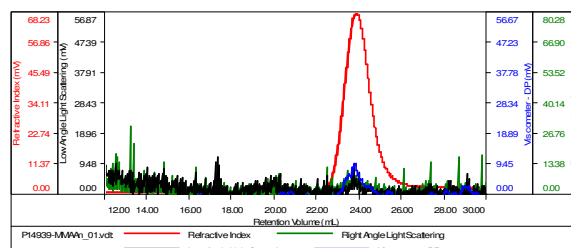
ATRP initiator: 9-anthracenemethyl-2-2-bromoisobutyrate



SEC elugrame:

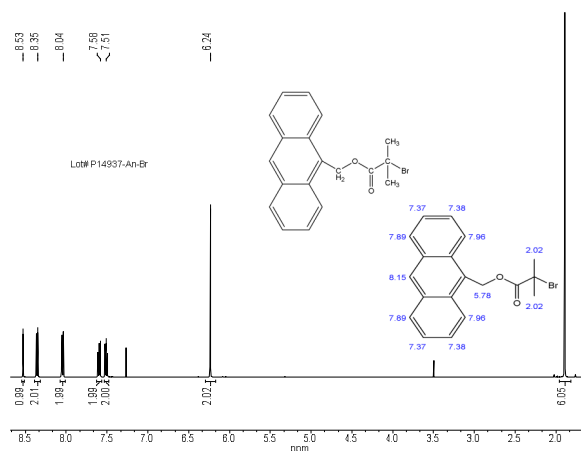
Sample ID: P14939-MMAAn

Concentration (mg/mL)	0.690
Sample dilution (mL/g)	0.1400
Method File	PS80K-June03-2015-0000.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)
P14939-MMAAn_01.vdt	4,138	5,090	5,036	1.220	0.2805

¹H NMR spectrum of initiator:



¹H NMR spectrum of polymer:

