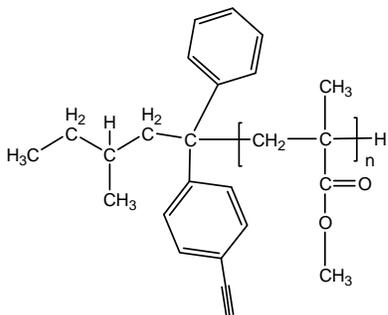


Sample Name:
Alkyne-terminated poly(methyl methacrylate)

Sample #: **P18720-MMA-Alkyne**

Structure:



Composition:

Mn x 10 ³	PDI
18.0	1.08

Alkyne functionality:	>90%
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Synthetic Procedure:

The polymer was prepared by anionic polymerization.

Characterization:

The product was characterized by NMR and FTIR. The molecular weight and polydispersity index (PDI) were obtained by size exclusion chromatography (SEC) in THF. 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.

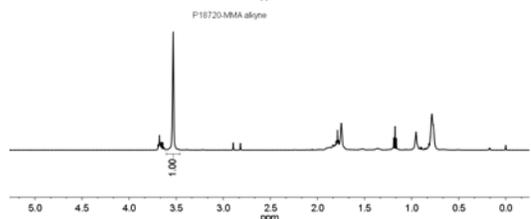
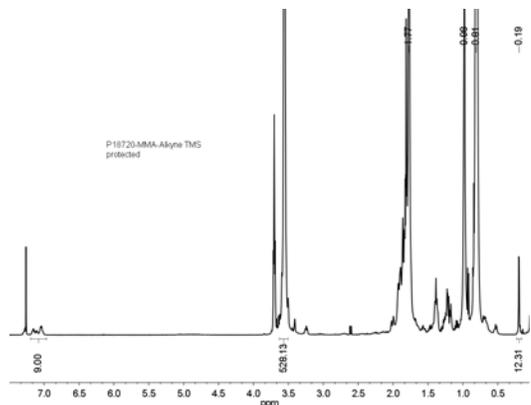
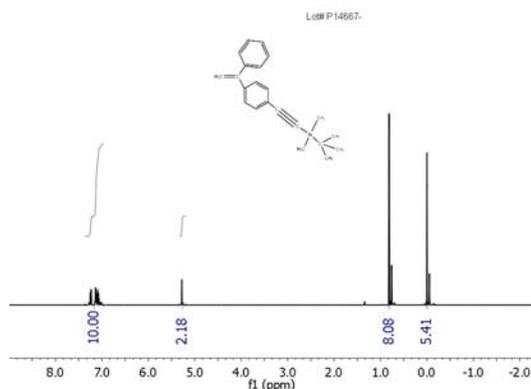
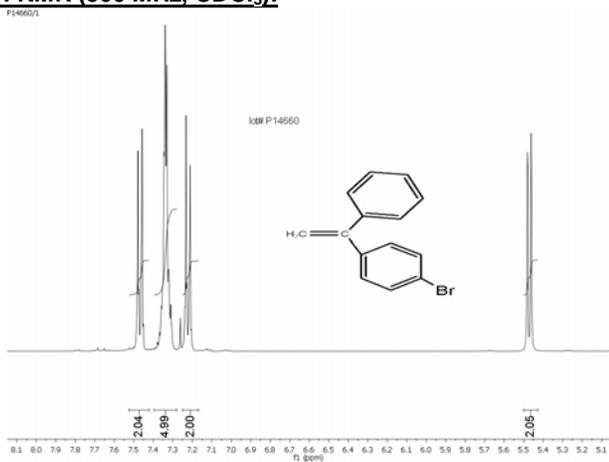
Functionality:

Degree of functionality was determined by ¹H NMR.

Solubility:

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

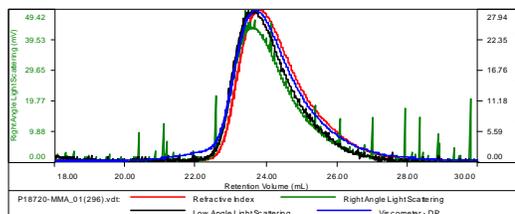
¹H NMR (500 MHz, CDCl₃):



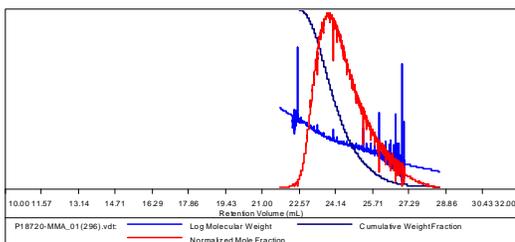
SEC elugram:

Sample ID: P18720-MMA

Concentration (mg/mL)	45.2788
Sample dn/dc (mL/g)	0.0840
Method File	PS80K-Apr15-2014-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18720-MMA_01(296).vdt	33,162	35,053	37,224	1.057	0.0777



(v. I-01)