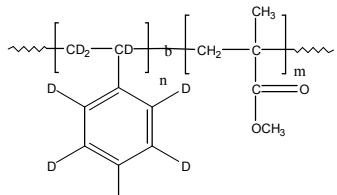


Sample Name: Deuterated Polystyrene (d_8)-Methylmethacrylate (protonated)
Sample #: P40176-dPSMMA

P40176-dPSMMA

Conc (mg/mL)	3.9417
dnd/dc (mL/g)	0.1300
Method	PS80k-October2016-0000.vcm
Solvent	DMF w/0.023M LiBr
Column	PSS

Structure:



Composition:

Mn x 10 ³ (dPS-b-MMA)	PDI
18.0-b-17.5	1.07
T _g for MMA block	134°C

Synthesis Procedure:

Deuterated poly(styrene(D8)-b-methyl methacrylate) is prepared by living anionic polymerization in THF at -78°C.

Characterization: By GPC and HNMR:

The polymer was characterized by 1H NMR and SEC.

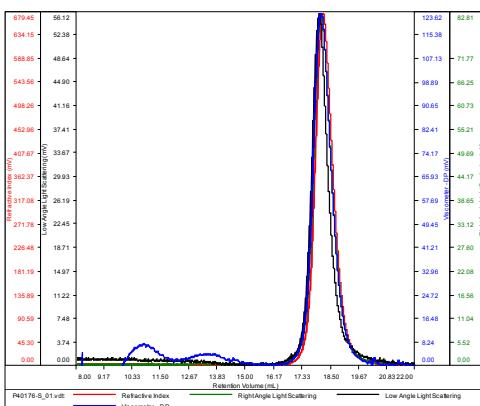
Solubility:

Deuterated polystyrene-d₈MMA is soluble in DMF, THF, toluene and CHCl₃. It precipitates from methanol, ethanol and hexanes.

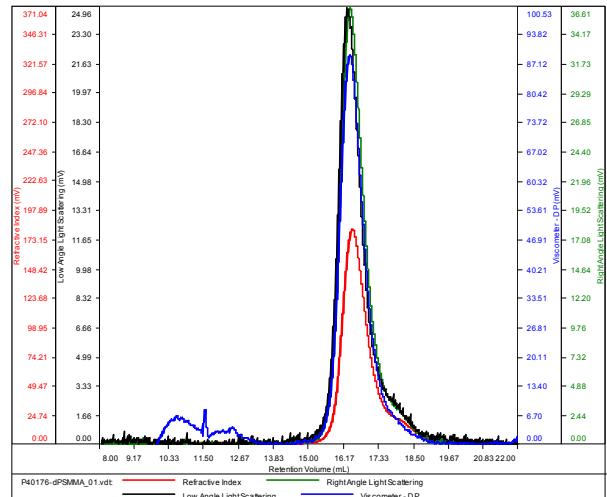
SEC of the product:

P40176-dPSMMA

Conc (mg/mL)	9.6764
dnd/dc (mL/g)	0.1650
Method	PS80k-October2016-0000.vcm
Solvent	DMF w/0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40176-S_01.vdt	18,227	18,835	17,967	1.033	0.2794



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40176-dPSMMA_01.vdt	35.495	38,041	37,582	1.072	0.5444

References for further information:

S. K. Varshney, R. Fayt, Ph. Teyssie, and J.P. Hautekeer US Patent 5,264,527 (1993)

1. Ph. Teyssie, Ph. Bayard, R. Jerome, S. K. Varshney, and J. S. Wang, *35th IUPAC International Union of Pure & Applied Chemistry International Symposium on Macromolecules* 1994, 67.
2. Ph. Teyssie, R. Fayt, J. P. Hautekeer, C. Jacobs, R. Jerome, L. Leemans and S. K. Varshney *Makromolekular Chemie, Macromol. Symp.*, 1990, 32, 61-73.
3. S. K. Varshney, J. P. Hautekeer, R. Fayt, R. Jerome, and Ph. Teyssie *Macromolecules*, 1990, 23, 2618-2622.
4. R. Jerome, R. Forte, S. K. Varshney, R. Fayt, and Ph. Teyssie. "The Anionic Polymerization of Alkylacrylates: A Challenge" in the Recent Advances in Mechanistic and Synthetic Aspects of Polymerization: M. Fontanaille and A. Guyot Ed., NATO ASI Series C 215, 101 (1987), CA Vol. 108, 12, 094992.