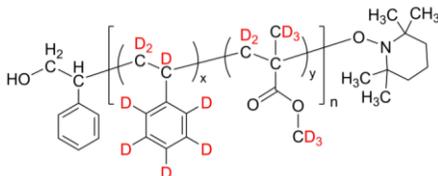


Sample Name:

**Poly([deuterated styrene-d8]-co-[deuterated methyl methacrylate-d8), ( $\alpha$ -hydroxy,  $\omega$ -TEMPO)-terminated**

Sample #: P43343A-dPSdPMMAran-OHT

Structure:



Composition:

Mn x 10 <sup>3</sup>	Mw/Mn (PDI)
23.0	1.05

dPS content mol%	74%
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Synthesis Procedure:

Hydroxy terminated Deuterated poly(styrene-co-methyl methacrylate) is prepared by stable free radical polymerization process at 135°C.

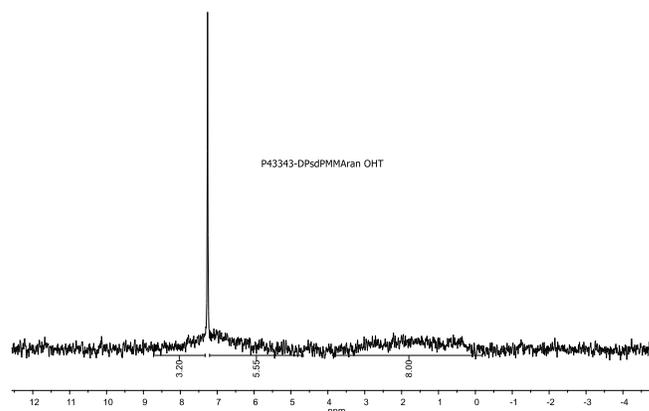
Characterization:

An aliquot of the copolymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI), the instrument calibrated by Polystyrene standards. The chemical composition was calculated from <sup>1</sup>H-NMR spectroscopy by comparing the peak area of the phenyl protons at 6.8-7.4 ppm with the peak area of methyl methacrylate at 2.6-3.6 ppm.

Solubility:

The polymer is soluble in THF, DMF, Toluene and chloroform. It precipitates from methanol and Hexanes.

<sup>2</sup>H NMR spectrum of the Sample:



SEC profile of the random copolymer:

