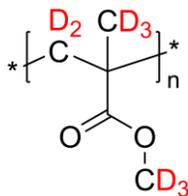


**Sample Name: Poly (methyl methacrylate)-d<sub>8</sub>**  
*Atactic rich*

**Sample #: P9777-dPMMA (Lot# P43275)**

**Structure:**



**Composition:**

Mn × 10 <sup>3</sup>	PDI
2.6	1.18

T <sub>g</sub> (°C):80
------------------------

**Synthesis Procedure:**

Deuterated poly(methyl methacrylate)-d<sub>8</sub> is obtained by living polymerization process.

**Characterization:**

The product was characterized by size exclusion chromatography (SEC) and <sup>1</sup>H NMR and D NMR data analysis.

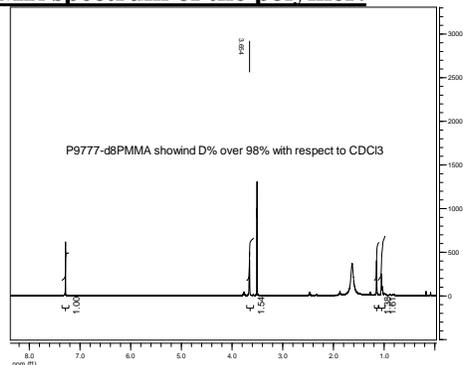
**Thermal analysis:**

Thermal analysis of the samples was carried out on a TA Q100 DSC at a heating rate of 10 °C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T<sub>g</sub>).

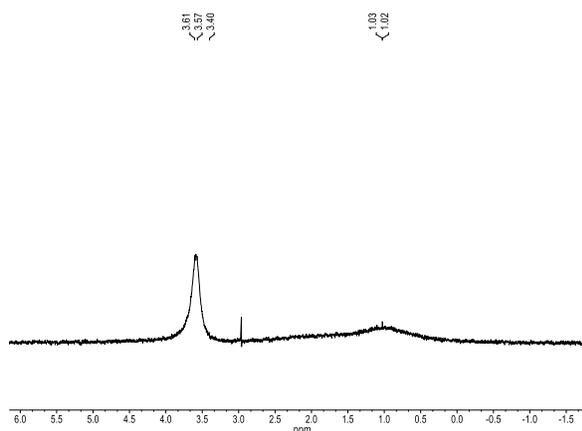
**Solubility:**

Deuterated poly(methyl methacrylate)-d<sub>8</sub> is soluble in THF, CHCl<sub>3</sub>, toluene and dioxane. The polymer precipitates from hexanes, methanol and ethanol.

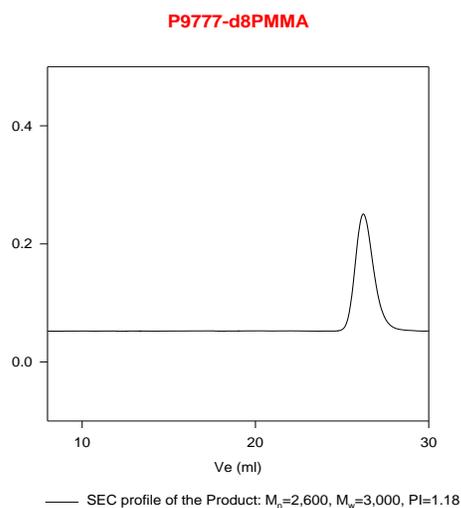
**HNMR spectrum of the polymer:**



**DNMR spectrum of the Sample:**



**SEC profile of Homopolymer:**



**DSC thermogram for the polymer:**

