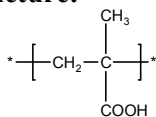


Sample Name:  
**Poly(methacrylic acid) rich in isotactic contents**

Sample #: **P40481-MAA**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
125.0	1.5
Iso contents	> 99%

**Synthesis Procedure:**

The polymer was synthesized by anionic polymerization process.

**Characterization:**

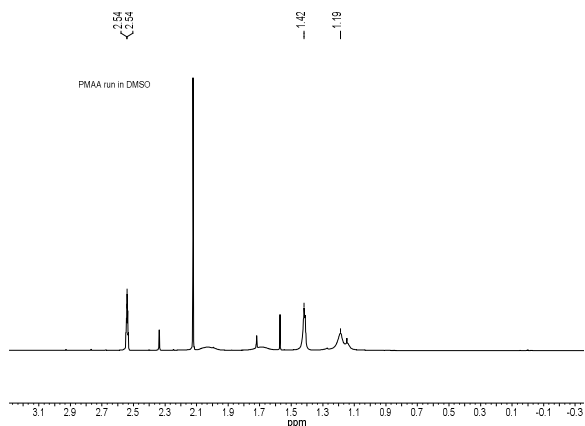
The molecular weight and polydispersity index (PDI) of Poly(methacrylic acid) are obtained by size exclusion chromatography based on its precursor in the ester form.

**Hydrolysis:** The removal of ester moiety to COOH was checked by their FTIR.

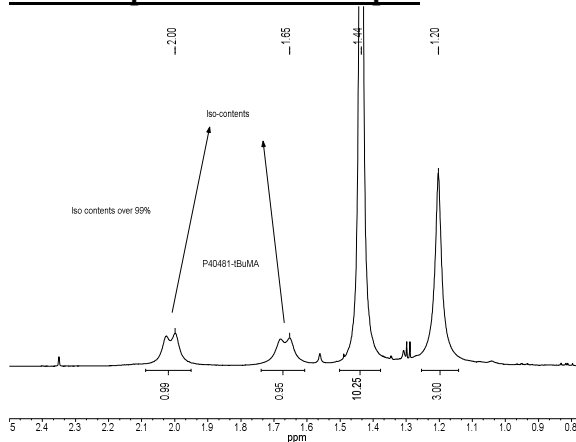
**Solubility:**

Polymer is soluble in methanol, ethanol.

**<sup>1</sup>HNMR spectrum of PtBuMA runs DMSO:**



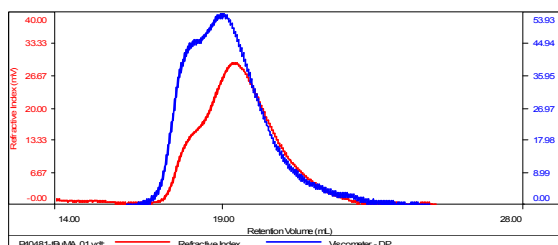
**<sup>1</sup>HNMR spectrum of the sample:**



**SEC of Homopolymer:**

**P40481-tBuMA precursor for PMAA**

Concentration (mg/mL)	1.4844
Sample dilution (mL/g)	0.0940
Method File	PS80K-Fit3D17-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P40481-tBuMA_01.vdt	202,931	304,376	1.500	2.4347	217,456

**References:**

1. S. K. Varshney, Z. Gao, Xing Fu Zhong, A. Eisenberg "Effect of Lithium Chloride on the "Living" Polymerization of tert-Butylmethacrylate and Polymer Microstructure Using Monofunctional Initiators" Macromolecules, 1994, 27, 1076