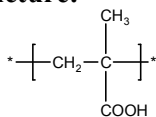


Sample Name:  
Poly(methacrylic acid) rich in isotactic contents

Sample #: P40483-MAA

Structure:



Composition:

Mn x 10 <sup>3</sup>	PDI
296.0	1.19
Iso contents	> 94%

Synthesis Procedure:

The polymer was synthesized by anionic polymerization process.

Characterization:

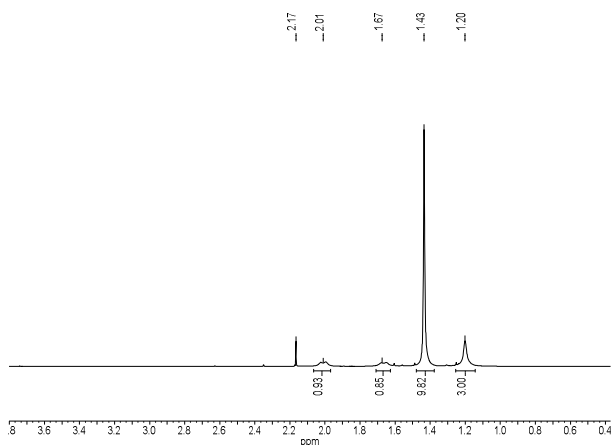
The molecular weight and polydispersity index (PDI) of Poly(methacrylic acid) are obtained by size exclusion chromatography based on its precursor in the ester form.

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

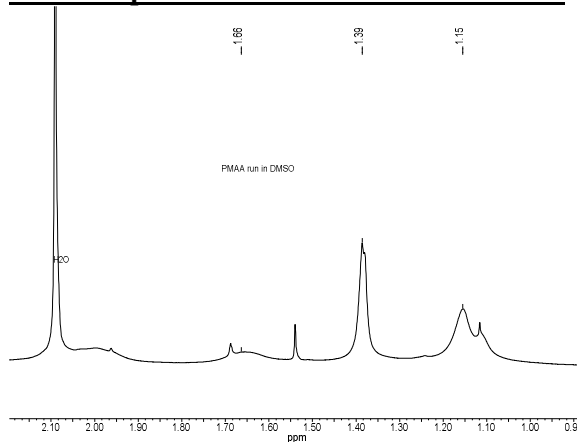
Solubility:

Polymer is soluble in methanol, ethanol.

**<sup>1</sup>HNMR spectrum of PtBuMA runs in CdCl<sub>3</sub>:**



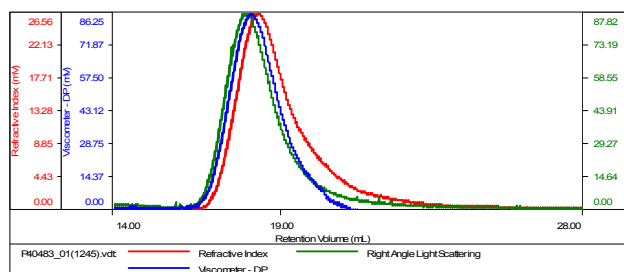
**<sup>1</sup>HNMR spectrum of PMAA runs in DMSO:**



**SEC of profile for the polymer:**

**P40483-tBuMA**

Concentration (mg/mL)	1.1173
Sample dn/dc (mL/g)	0.0840
Method File	PS80K-Feb2017-0000.vcm
Column Set	3x PL 1113/6300
Solvent	THF



Sample	Mh (Da)	Mw (Da)	Mw/Mh	IV (dL/g)	Mp (Da)
P40483_01(1245).vdt	481,949	573,435	1.190	3.4963	559,469

**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