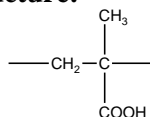


Sample Name: Poly(methacrylic acid)  
*rich in Atactic contents*

Sample #: P41679-MAA

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
10.0	1.4

**Synthesis Procedure:**

The product was characterized by controlled RAFT 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:**

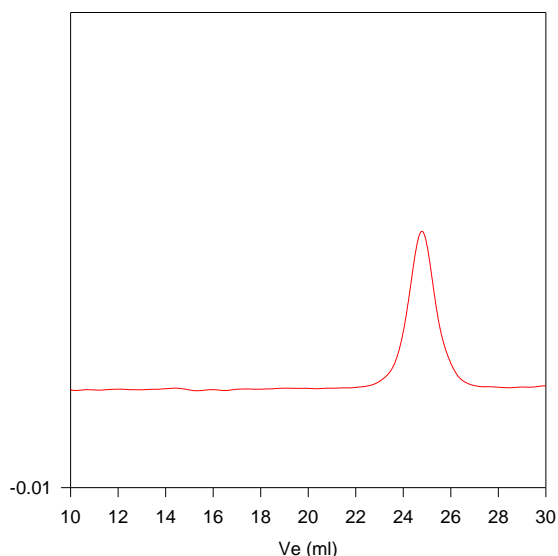
The removal of tert.butyl ester moiety to COOH was checked by their FTIR, disappearance of characteristics at 1365cm<sup>-1</sup>.

**Solubility:**

Polymer is soluble in methanol, ethanol.

**SEC profile of the Homopolymer:**

**P41679-MAA**



Size Exclusion Chromatography of Poly-MAA

M<sub>n</sub>=10,000, M<sub>w</sub>=14,000, M<sub>w</sub>/M<sub>n</sub>=1.4

**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