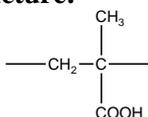


Sample Name: Poly(methacrylic acid)
rich in Atactic contents

Sample #: P41679-MAA

Structure:



Composition:

$M_n \times 10^3$	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:

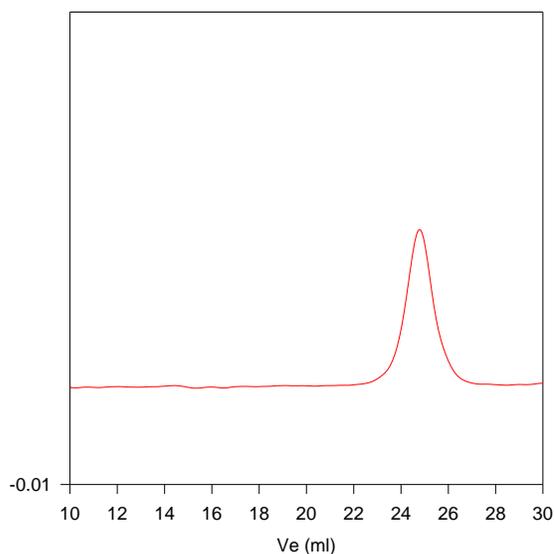
The removal of tert.butyl ester moiety to COOH was checked by their FTIR, disappearance of characteristics at 1365cm⁻¹.

Solubility:

Polymer is soluble in methanol, ethanol.

SEC profile of the Homopolymer:

P41679-MAA



Size Exclusion Chromatography of Poly-MAA

$M_n=10,000$, $M_w=14,000$, $M_w/M_n=1.4$

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