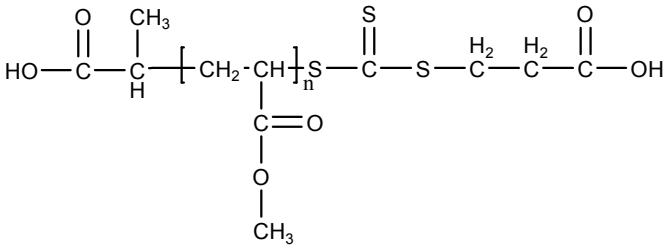
Sample Name: **Poly(methyl acrylate), RAFT-agent terminated**

Sample #: **P16114-MA-RAFT macroinitiator**

Structure:



Composition:

Mn x 10^3	PDI
22.0	1.10

Synthesis Procedure:

The poly(methyl acrylate) was prepared by RAFT controlled process of methyl acrylate monomer in 1,4-dioxane.

Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in DMF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and light scattering detectors.

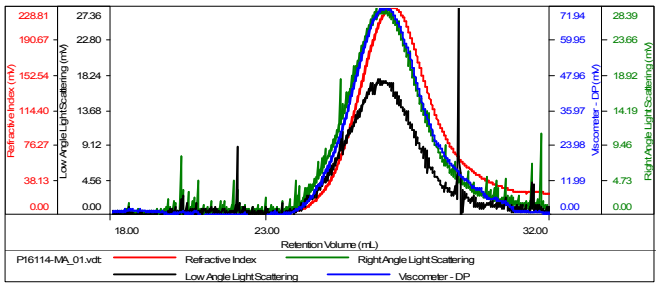
Solubility:

Poly (methyl acrylate) is soluble in THF and DMF This polymer precipitates from methanol containing 10-50% water.

SEC elugram of the polymer:

Sample ID: P16114-MA

Concentration (mg/mL)	68.9953
Sample dn/dc (mL/g)	0.0680
Method File	PS80K-Oct2016-2-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P16114-MA_01.vdt	22,240	24,496	1.101	0.0925	24,581

References:

1. Ph. Teyssie, Ph. Bayard, R. Jerome, **S. K. Varshney**, and J. S. Wang, *35th IUPAC International Union of Pure & Applied Chemistry International Symposium on Macromolecules" 1994, 67.*
2. R. Fayt, R. Forte, C. Jacobs, R. Jerome, T. Ouhadi, Ph. Teyssie and **S. K. Varshney,** *Macromolecules, 1987, 20, 1442-1444.*
3. Jerome, R. Forte, **S. K. Varshney**, R. Fayt, and Ph. Teyssie, "The Anionic Polymerization of Alkylacrylates:A Challenge" in the Recent Advances in Mechanistic and Synthetic Aspects of Polymerization: M. Fontanaille and A. Guyot Ed., NATO ASI Series *C 215,101 (1987), CA Vol. 108, 12, 094992.*
4. Ph. Teyssie, R. Fayt, C. Jacobs, R. Jerome, L. Leemans, and **S. K. Varshney** *Am. Chem. Soc.,Polym. Prepr. 1988, 28, 2, 52-53.*