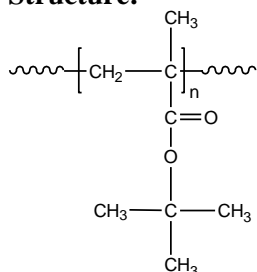


Sample Name: **Poly(t-butyl methacrylate)**
Atactic Rich

Sample #: **P18774-tBuMA**

Structure:



Composition:

$M_n \times 10^3$	PDI
6.5	1.45
S:H:I	0: 94:6

Synthesis Procedure:

Poly(t-butylmethacrylate) was obtained by GTP process.

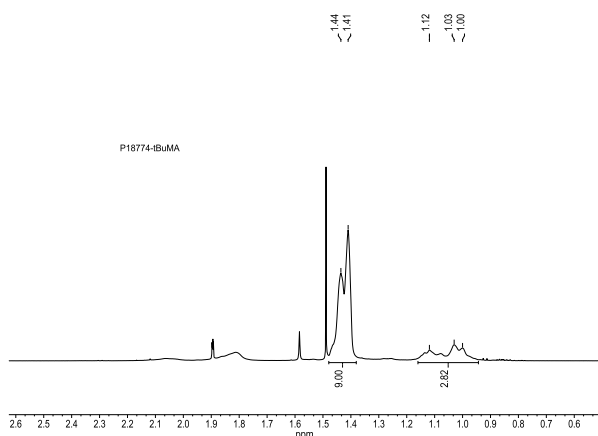
Characterization:

The product was characterized by size exclusion chromatography (SEC) and ^1H NMR.

Solubility:

Poly(tert-butyl methacrylate) is soluble in THF, CHCl_3 , toluene and dioxane. The polymer precipitates from cold methanol and ethanol.

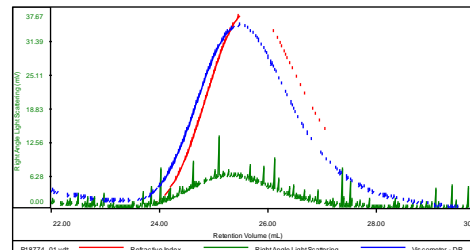
^1H NMR of the Polymer



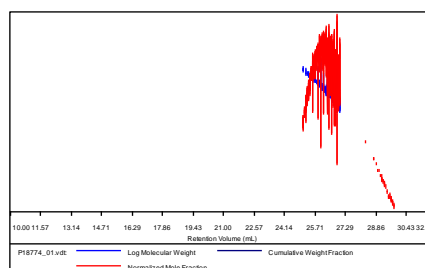
SEC elugram of Homopolymer:

Sample ID: P18774-tBuMA

Concentration (mg/mL)	1.6996
Sample dn/dc (mL/g)	0.0840
Method File	PS80K-July11-2014-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF

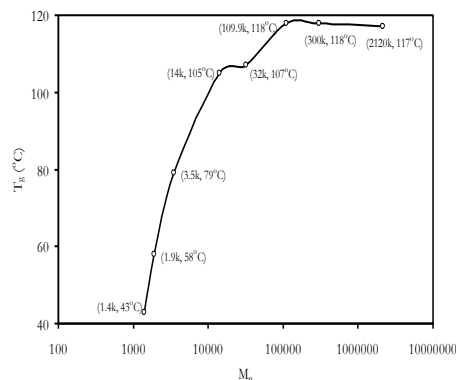


Sample	Mn	Mw	Mp	Mw/Mn	IV
P18774_01.vdt	6,682	9,826	9,852	1.470	0.6339



DSC thermogram of the Product:

T_g of poly t-butyl methacrylate as function of molecular weight



T_g vs MW for selected poly t-butyl methacrylate

$M_n \times 10^3$	T_g (°C)	$M_n \times 10^3$	T_g (°C)
1.4	43	32	107
1.9	58	109.9	118
3.5	79	300	118
14	105	2120	117

References for further information:

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.