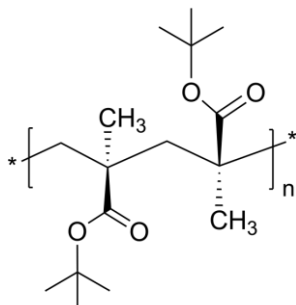


Sample Name:

**Poly(tert-butyl methacrylate), syndiotactic**

Sample#: **P43682-tBuMA**

Structure:



Composition:

$M_n \times 10^3$	PDI
156.0	1.13

S:H:I: 54:42:4

Synthesis Procedure:

Poly(t-butyl methacrylate) is obtained by living anionic polymerization of t-butyl methacrylate.

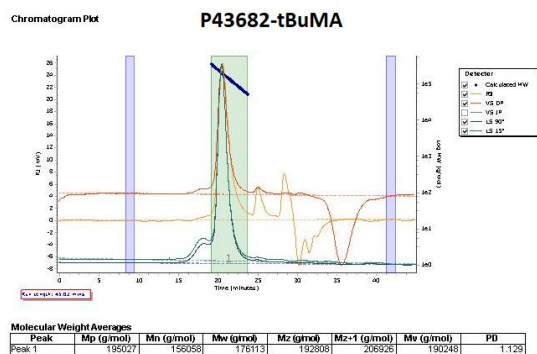
Characterization:

The product was characterized by size exclusion chromatography (SEC).

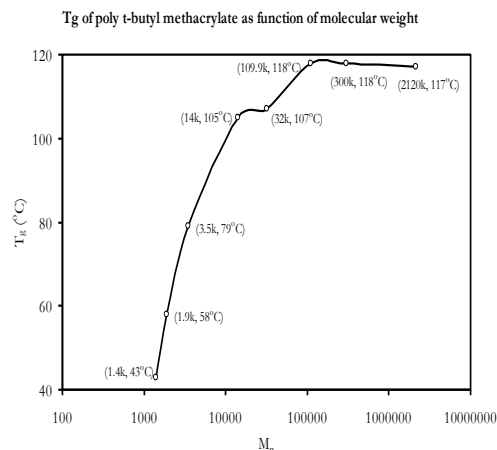
Solubility:

Poly(tert-butylmethacrylate) is soluble in THF,  $\text{CHCl}_3$ , toluene and dioxane. The polymer precipitates from cold methanol and ethanol.

**SEC elugram of Homopolymer:**



**DSC thermogram of the Product:**



**$T_g$  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.