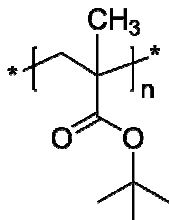


Sample Name: Poly(*tert*-butyl methacrylate),
predominantly syndiotactic

Sample #: P40623-tBuMA

Structure:



Composition:

$M_n \times 10^3$ (g/mol)	M_w/M_n
443	1.05

Synthesis procedure:

Poly(*tert*-butyl methacrylate) was obtained by living anionic polymerization. For more details, see ref.[1].

Characterization:

The tacticity of the polymer was calculated from ^1H NMR spectroscopy data.

The molecular weight and polydispersity index (M_w/M_n) of the polymer were determined by size exclusion chromatography (SEC) equipped with a triple detector and using DMF as an eluent.

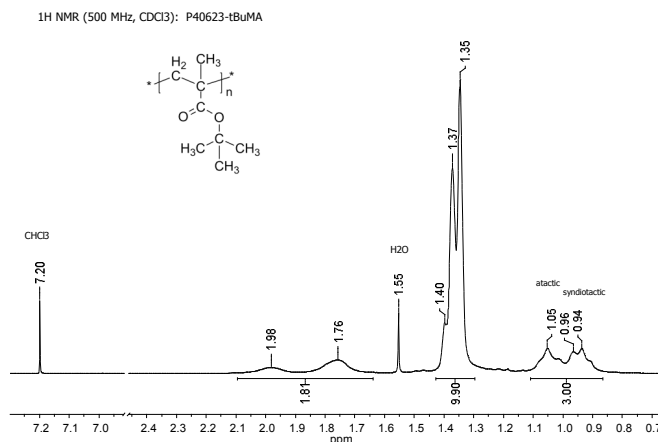
Solubility:

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

Reference:

1. S. K. Varshney, Z. Gao, X. F. Zhong, A. Eisenberg, "Effect of Lithium Chloride on the "Living" Polymerization of *tert*-Butylmethacrylate and Polymer Microstructure Using Monofunctional Initiators". *Macromolecules* 1994, 27, 1076.

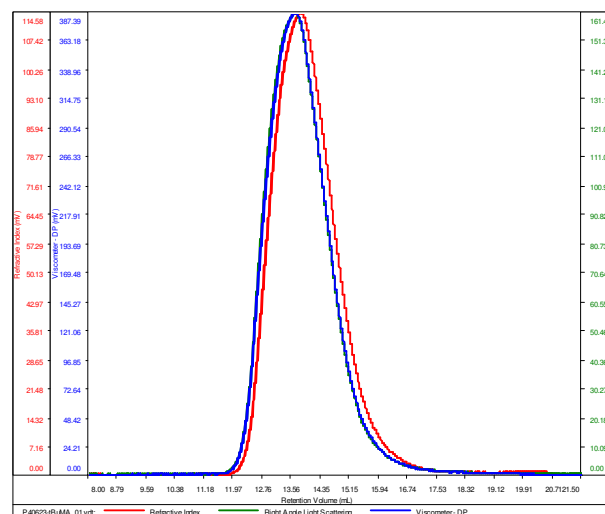
^1H NMR (500 MHz, CDCl_3) spectrum:



SEC elugram:

P40623-tBuMA

Conc	28.2394
dn/dc	0.0600
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k-May2017-0000.vcm



Sample	M_n	M_w	M_p	M_w/M_n	IV
P40623-tBuMA_01.vdt	443,813	467,764	463,031	1.054	0.3013