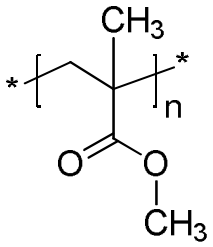
Sample name: **Poly(methyl methacrylate)**

Sample # **I-0004-MMA**

Structure:



CAS Number: 9011-14-7

Composition:

$M_n \times 10^3$ (g/mol)	M_w/M_n
49.0	1.6

Tacticity:

syndio : hetero : iso	48 : 39 : 13

Physical properties:

Appearance:	beads
Colour:	white
Glass transition temperature:	T_g = 107 °C

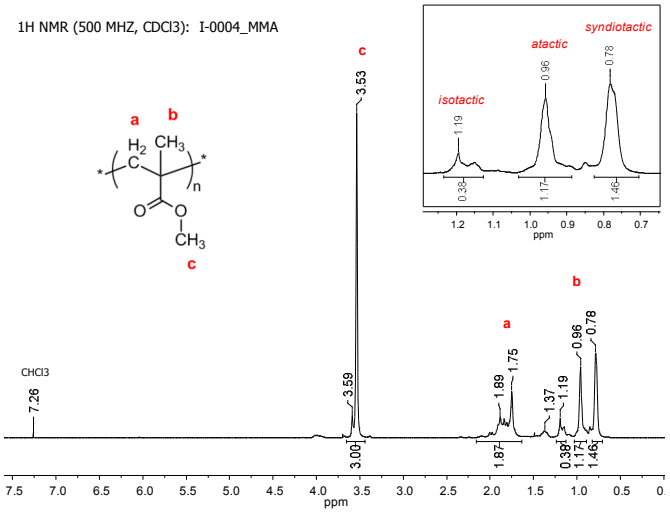
Characterization methods:

^{1}H NMR data was recorded on Bruker Avance III 500 NMR spectrometer. Chlorofom-d was used as a solvent.

The molecular weight and polydispersity index of the polymer were determined by size exclusion chromatography (SEC).

Thermal analysis was performed on TA Instruments Q100 differential scanning calorimeter (DSC) under a nitrogen atmosphere. The glass transition temperature (T_g) of the polymer was measured at a scan rate of 10°C/min shortly after creating thermal history of the sample.

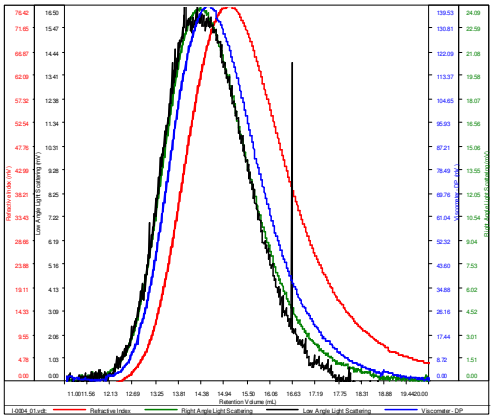
^{1}H NMR spectrum of PMMA in $CDCl_3$:



SEC elugram of the PMMA in DMF:

I-0004_PMMA

Conc	14.4713
dn/dc	0.0650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS100k_2017-Oct11-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
I-0004_01.vdt	49,249	80,215	77,404	1.629	0.2860

DSC thermogram (2nd heating scan, 10°C/min):