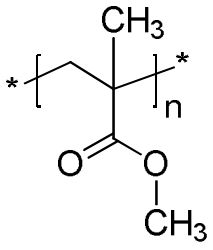
Sample name: **Poly(methyl methacrylate)**

Sample # **I-0005-MMA**

**Structure:**



CAS Number: 9011-14-7

**Composition:**

| $M_n \times 10^3$ (g/mol) | $M_w/M_n$ |
|---|---|
| 238.0 | 1.6 |

**Tacticity:**

| syndio : hetero : iso | 57 : 38 : 5 |
|---|---|

**Physical properties:**

| | |
|---|---|
| Appearance: | beads |
| Colour: | white |
| Glass transition temperature: | $T_g$ = 115 °C |

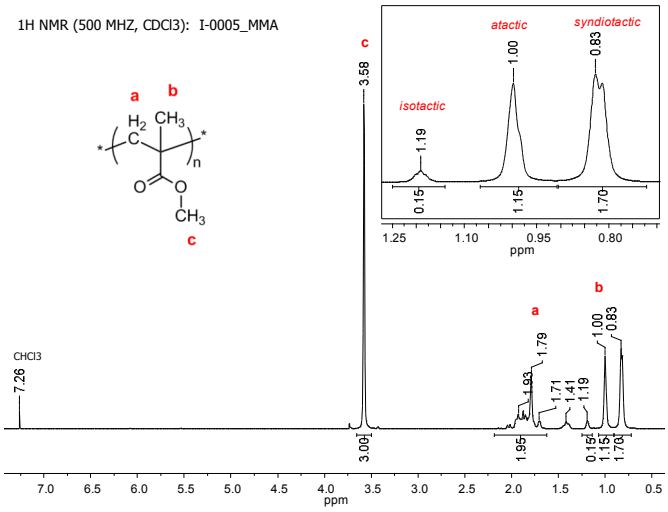
**Characterization methods:**

$^1$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.

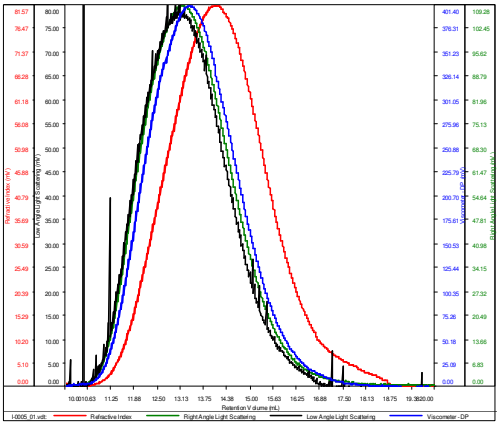
## $^1$H NMR spectrum of PMMA in $CDCl_3$:




## SEC elugram of the PMMA in DMF:

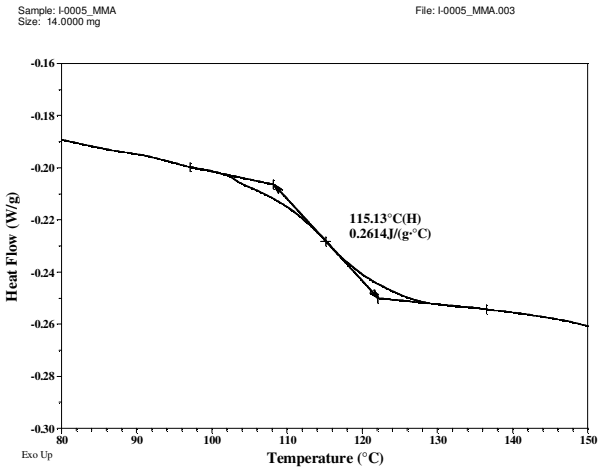
**I-0005_PMMA**

| | |
|---|---|
| Conc | 16.0976 |
| dn/dc | 0.0650 |
| Solvent | DMF w 0.023MLiBr |
| Flow Rate | 0.7000 |
| Method | PS100k_2017-Oct11-0000.vcm |



| Sample | Mn | Mw | Mp | Mw/Mn | IV |
|---|---|---|---|---|---|
| I-0005_01.vdt | 238,044 | 386,642 | 317,529 | 1.624 | 0.8012 |

## DSC thermogram (2$^{nd}$ heating scan, 10°C/min):




(v. I-01)