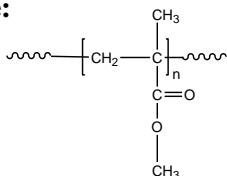


Sample Name: Poly (methyl methacrylate)

Different microstructure

Sample #: P43237-MMA

Structure:



Composition:

$M_n \times 10^3$	PDI
666.0	1.22

Isotactic: Hetero : Syndio	5:35:60
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Synthesis Procedure:

Poly (methyl methacrylate) is obtained by controlled radical polymerization or GTP process.

Characterization:

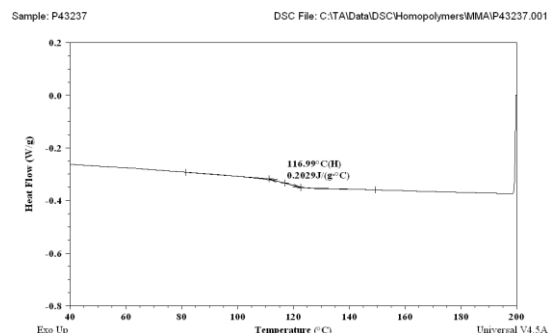
The product was characterized by size exclusion chromatography (SEC) and ^1H NMR.

Solubility:

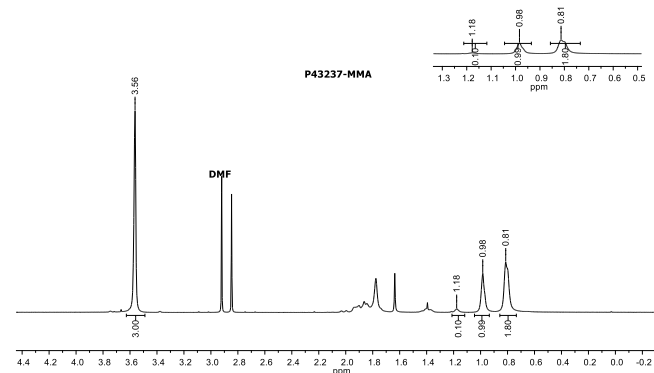
The polymer is soluble in THF, CHCl_3 , toluene and dioxane. The polymer precipitates from cold methanol and ethanol.

T_g vs MW for selected atactic PMMA:

$M_n \times 10^3$	T_g (°C)	$M_n \times 10^3$	T_g (°C)
1.1	51	36	98
2.5	76	55	111
5.0	91	70	107
15	101	127	115
19	107	230	114
29	96	700	121



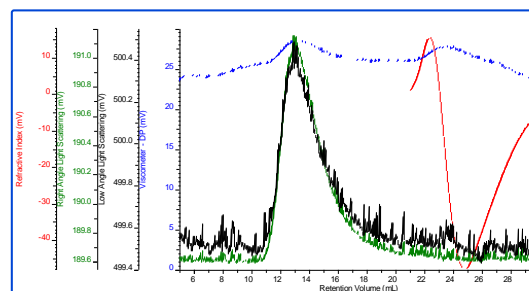
^1H NMR spectrum of PMMA Sample:



SEC elugram of PMMA homopolymer:

P43237_MMA

dn/dc	0.0570
Flow Rate	0.7000
Solvent	DMF with LiBr
Method	Calibration_2020-11-25_PMMA-85K-0003.vcm



Sample	M_n	M_w	M_p	M_w/M_n
P43237-MMA_1_2021-05-4	666,537	818,594	612,114	1.228

DSC thermogram:

Tg of atactic poly methyl methacrylate as function of molecular weight

