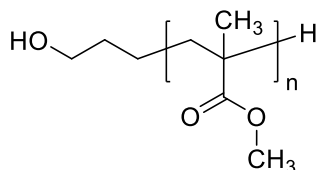


**Sample Name:** Poly(methyl methacrylate),  
 **$\alpha$ -hydroxypropyl-terminated**

**Sample ID #:** P42579-MMAOH

**CAS registry number:** 9011-14-7

**Structure:**



**Composition:**

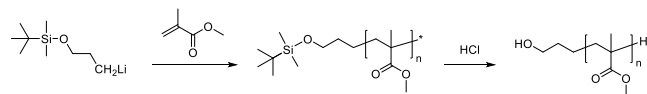
$M_n \times 10^3$ (g/mol)	$M_w/M_n$
143	1.1

**Tacticity:**

Isotactic: Atactic : Syndiotactic	1 : 19 : 80
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**Synthesis Procedure:**

Poly(methyl methacrylate) was obtained by living anionic polymerization of methyl methacrylate. The scheme of reaction is presented below.

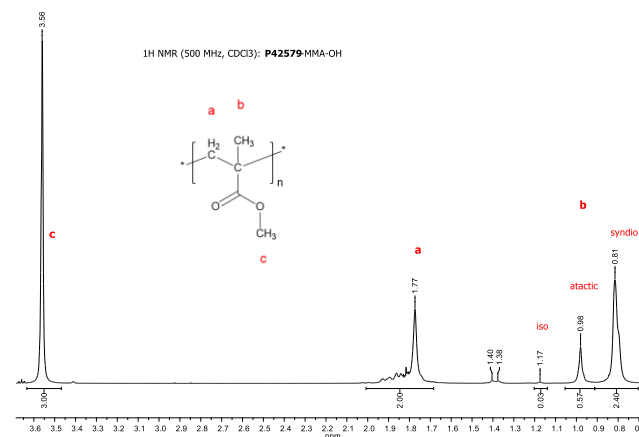


**Characterization:**

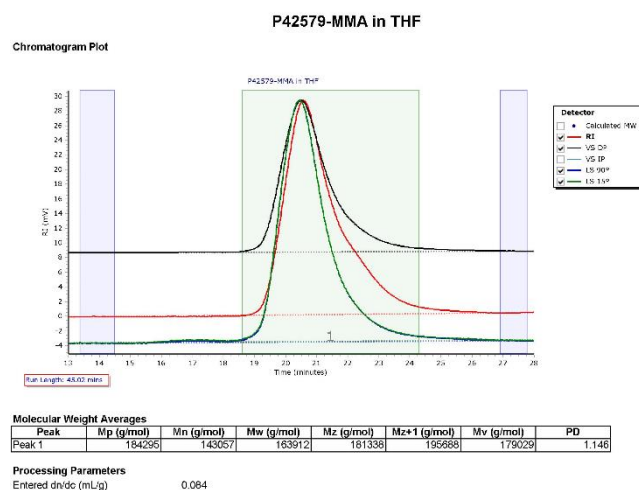
The steric arrangement in polymer was calculated from proton NMR spectroscopy data.

The molecular weight and polydispersity index of the polymer were determined by size exclusion chromatography (SEC) in tetrahydrofuran (THF) and dimethylformamide (DMF). SEC analysis was performed on Agilent Technologies 1260 Infinity II GPC/SEC system equipped with triple detector, three columns and using THF as a mobile phase; and Malvern OmniSEC Resolve system equipped with OmniSEC Reveal triple detector, two columns and using DMF as a mobile phase.

**$^1\text{H}$  NMR spectrum of the polymer in chloroform- $d_3$ :**

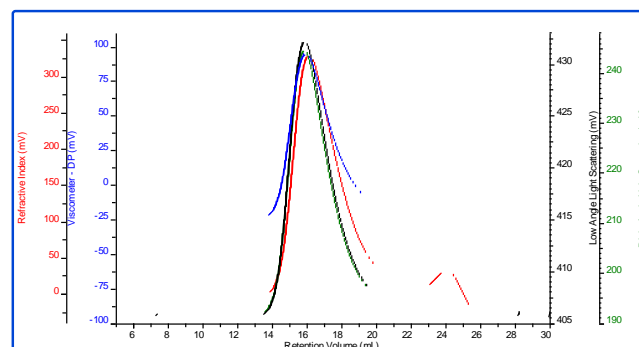


**SEC chromatogram of the polymer:**



**P42579-MMA in DMF**

<b>dn/dc</b>	0.0570
<b>Flow Rate</b>	0.7000
<b>Solvent</b>	DMF with LiBr
<b>Method</b>	PSS column-PMMA60K-Jan3-2019-0013.vcm



Sample	Mn	Mw	Mp	Mw/Mn
P42579-MMA-OH_1_2020-08-07	143,627	156,661	161,561	1.091