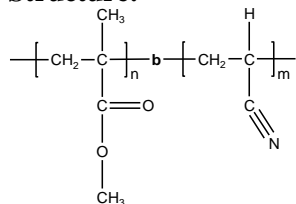


Sample Name:  
**Poly (Methylmethacrylate-b-Acrylonitrile)**

Sample #: **P41056-MMAACN**  
*PMMA block rich in Syndiotactic fraction*

**Structure:**



**Composition:**

$M_n \times 10^3$ MMA-b-ACN	$M_w/M_n$ (PDI)
43.0-b-197.0	1.45

Color : Orange color

**Synthesis Procedure:**

Polymer is prepared by anionic polymerization process.

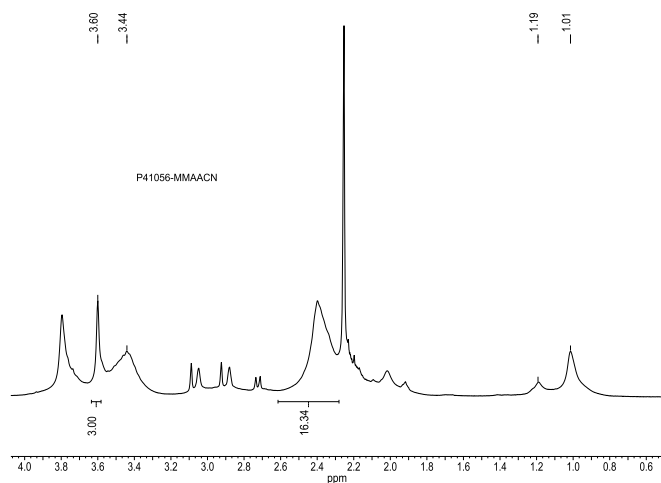
**Characterization:**

The polymer was characterized by size exclusion chromatography (SEC) in DMF and  $^1\text{H}$  NMR.

**Solubility:**

Polymer is soluble in THF, Chloroform, DMF, and precipitated in methanol and hexanes.

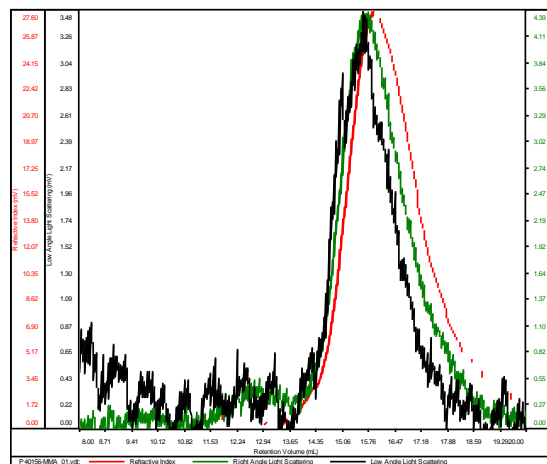
**$^1\text{H}$  NMR spectrum of the Polymer in DMF:**



**SEC elugram of the MMA block:**

P41056-MMA

Conc	4.0837
dn/dc	0.0650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS-80k_2018-04-02-0000.vcm

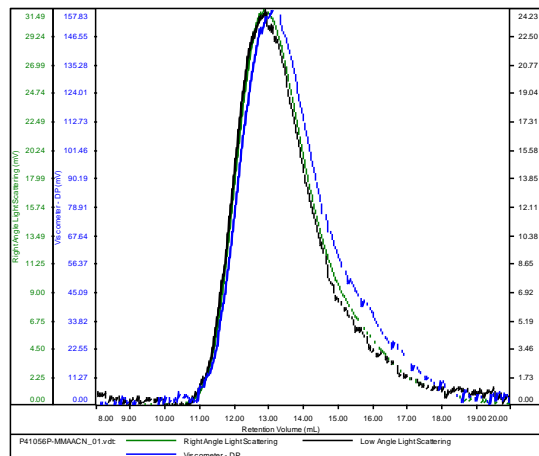


Sample	$M_n$	$M_w$	$M_p$	$M_w/M_n$	IV
P40156-MMA_01.vdt	42,716	45,051	47,021	1.055	0.1649

**SEC elugram of the polymer:**

P41056P-MMAACN

Conc	4.6652
dn/dc	0.0650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS-80k_2018-04-02-0000.vcm



Sample	$M_n$	$M_w$	$M_p$	$M_w/M_n$	IV
P41056P-MMAACN_01.vdt	239,500	346,357	344,557	1.446	1.0316