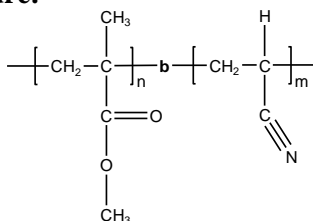


Sample Name:  
**Poly (Methylmethacrylate-b-Acrylonitrile)**

Sample #: **P41247-MMAACN**  
*PMMA block rich in Syndiotactic fraction*

**Structure:**



**Composition:**

Mn × 10 <sup>3</sup> MMA-b-ACN	Mw/Mn (PDI)
10.0-b-14.5	1.45

Color of the Product: Ivory color

**Synthesis Procedure:**

The polymer is prepared by controlled radical polymerization process.

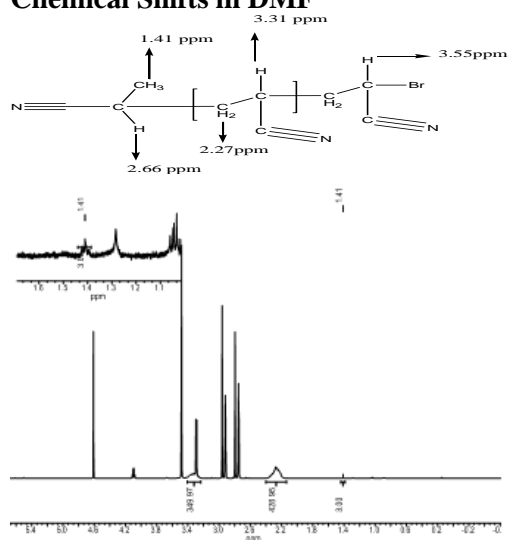
PACN-Br macroinitiator prepared by controlled radical process in ethylene carbonate as solvent.

**Characterization:**

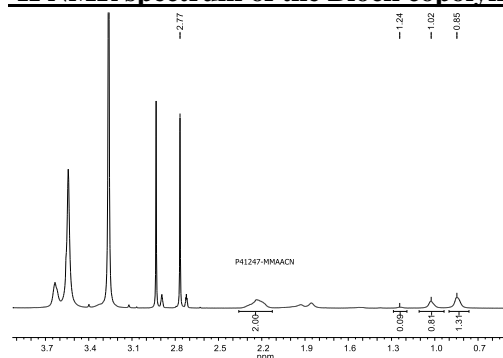
The polymer was characterized by <sup>1</sup>H NMR and size exclusion chromatography (SEC) in DMF.

Composition determined by HNMR and Distribution in DMF by GPC.

**<sup>1</sup>H NMR spectrum of the PACN-Br macroinitiator:**  
**Chemical Shifts in DMF**



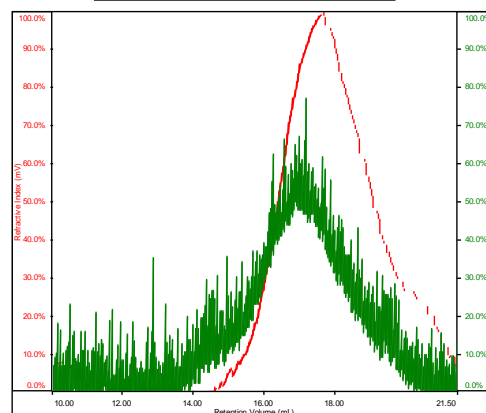
**<sup>1</sup>H NMR spectrum of the Block copolymer in DMF:**



**SEC elugram of the PACN-Br macroinitiator (used in this polymer) in DMF:**

P41247-1

Conc	2.1356
dn/dc	0.0920
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS99K_2018-05-30-0000.vcm

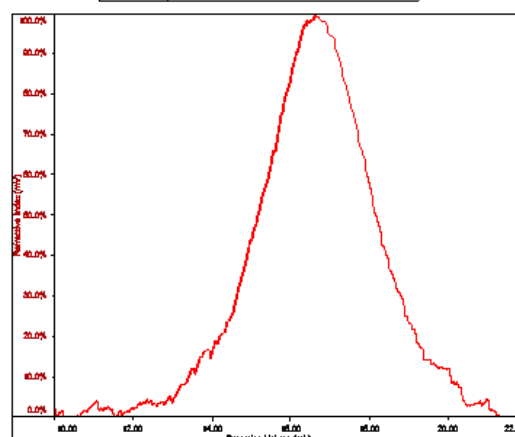


Sample	Mn	Mw	Mp	Mw/Mn	IV
P41247-ACN-Br_01.vdt	14,514	17,300	13,878	1.192	0.8410

**SEC elugram of the Sample:**

P41247-ACN-MMA

Conc	2.1605
dn/dc	0.0903
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS99K_2018-05-30-0000.vcm



Composition from HNMR analysis