

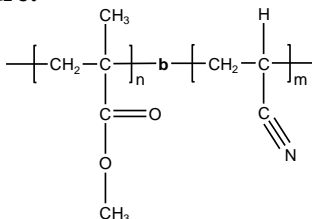
Sample Name:

Poly (Methylmethacrylate-b-Acrylonitrile)

Sample #: **P41247A-MMAACN**

PMMA block rich in Syndiotactic fraction

Structure:



Composition:

$M_n \times 10^3$ MMA-b-ACN	M_w/M_n (PDI)
10.0-b-14.5	1.5

Color of the Product : Dark brown

Synthesis Procedure:

The polymer is prepared by controlled radical polymerization process.

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

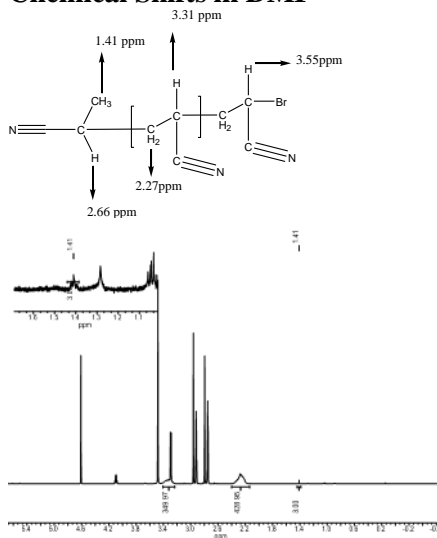
Characterization:

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

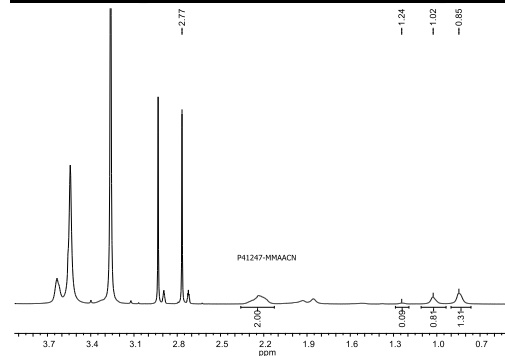
Composition determined by HNMR and Distribution in DMF by GPC.

^1H NMR spectrum of the PACN-Br macroinitiator in DMF

Chemical Shifts in DMF



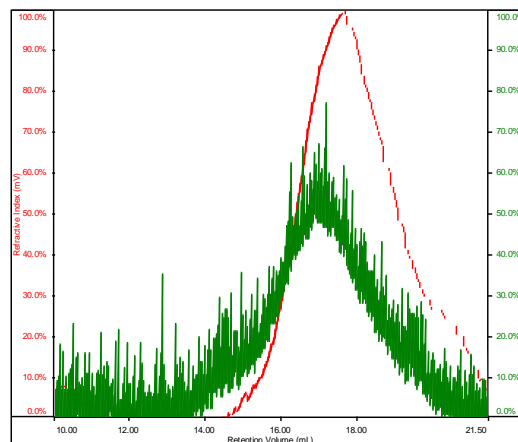
^1H NMR spectrum of the Block copolymer in DMF:



SEC elugram of the PACN-Br macroinitiator:

P41247-1

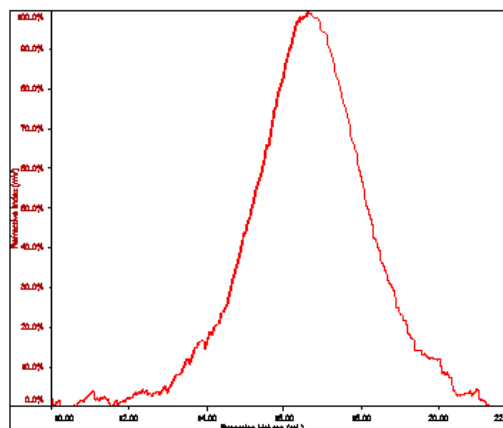
Conc	2.1356
dn/dc	0.0920
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS99K_2018-05-30-0000.vcm



Sample	M_n	M_w	M_p	M_w/M_n	IV
P41247-ACN-Br_01.vdt	14,514	17,300	13,878	1.192	0.8410

P41247-ACN-MMA

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



Composition from HNMR analysis