

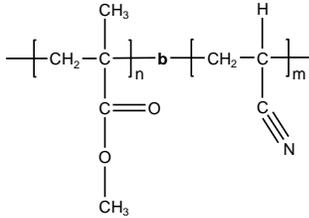
Sample Name:

Poly (Methylmethacrylate-b-Acrylonitrile)

Sample #: **P41247A-MMAACN**

PMMA block rich in Syndiotactic fraction

Structure:



Composition:

Mn × 10 ³ MMA-b-ACN	Mw/Mn (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.

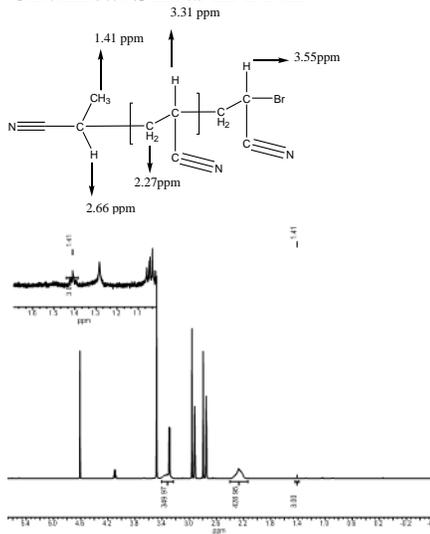
Characterization:

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

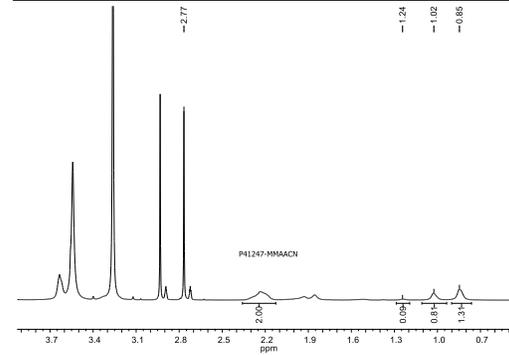
Composition determined by HNMR and Distribution in DMF by GPC.

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

Chemical Shifts in DMF



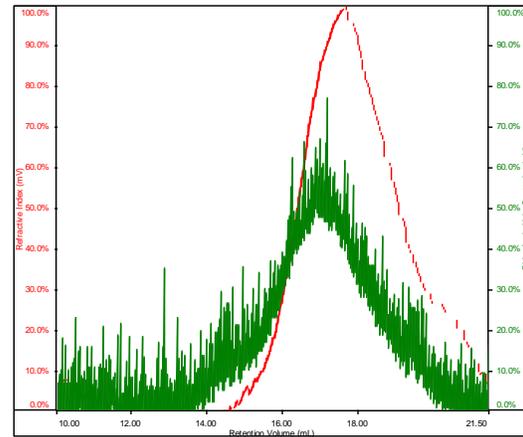
¹H NMR spectrum of the Block copolymer in DMF:



SEC elugram of the PACN-Br macroinitiator:

P41247-1

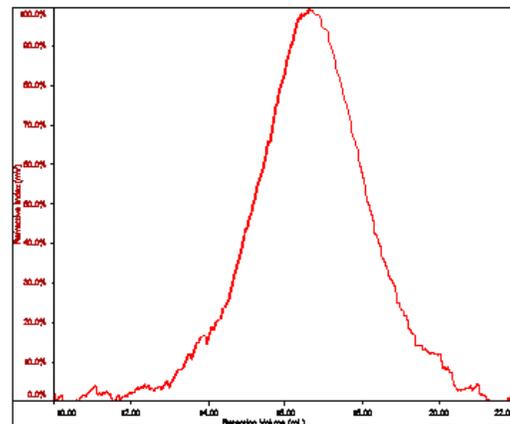
Conc	2.1356
dn/dc	0.0920
Solvent	DMF w 0.023MLiBr
Flow Rate	0.7000
Method	PS99K_2018-05-30-0000.vcm



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

P41247-ACN-MMA

Date	2.7.2025
dn/dc	0.0780
Solvent	DMF w 0.023MLiBr
Flow Rate	0.7000
Method	PS99K_2018-05-30-0000.vcm



Composition from HNMR analysis