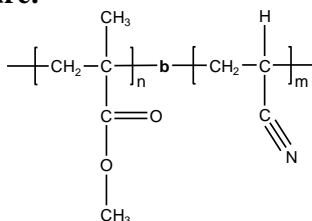Sample Name:
Poly (Methylmethacrylate-b-Acrylonitrile)

Sample #: **P41177C-MMAACN**
PMMA block rich in Syndiotactic fraction

Structure:

Composition:

Mn × 10³ MMA-b-ACN	Mw/Mn (PDI)
7.0-b-14.0	1.18

Color of the Product : Dark Brown

Synthesis Procedure:
The polymer is prepared by controlled radical polymerization process.
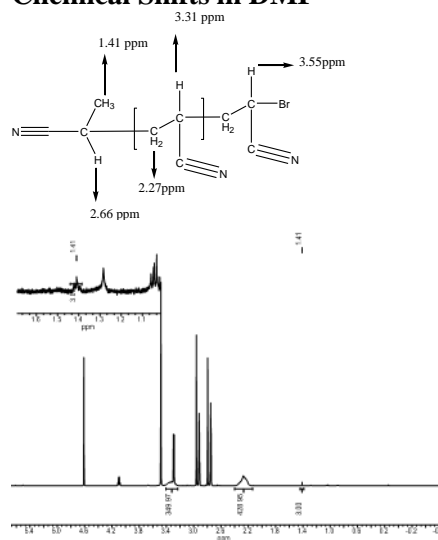PACN-Br macroinitiator prepared by controlled radical process in ethylene carbonate as solvent.

Characterization:
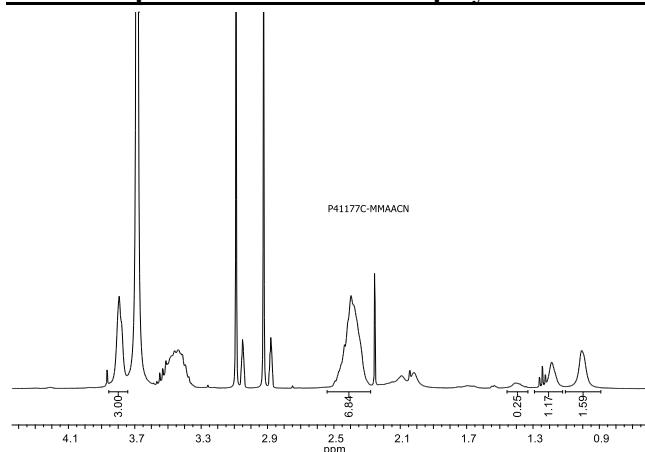The polymer was characterized by ^{1}H NMR and size exclusion chromatography (SEC) in DMF.
Composition determined by HNMR and Distribution in DMF by GPC.

^{1}H NMR spectrum of the PACN-Br macroinitiator in DMF
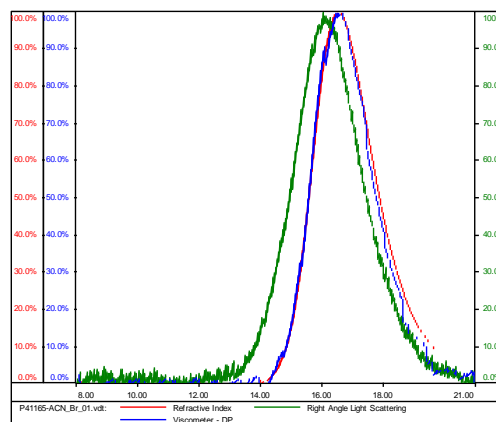**Chemical Shifts in DMF**

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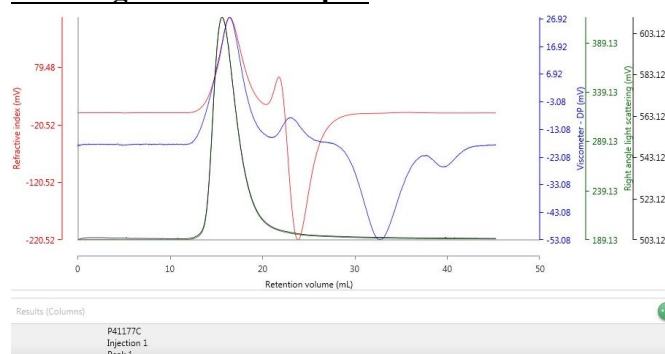

SEC elugram of the PACN-Br macroinitiator in DMF:

P41165-ACN-BR

Conc	4.4272
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
P41165-ACN_Br_01.vdt	14,108	21,080	14,961	1.494	0.7375

SEC elugram of the Sample:

Composition from HNMR and Mw/Mn by GPC in DMF