

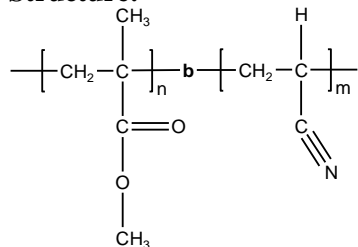
Sample Name:

Poly (Methylmethacrylate-*b*-Acrylonitrile)

Sample #: **P42965-2-MMAACN**

PMMA block rich in Syndiotactic fraction

Structure:



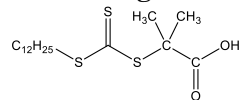
Composition:

Mn × 10 ³ MMA- <i>b</i> -ACN	Mw/Mn (PDI)
14.5-10.0	1.08
Color	off white

Synthesis Procedure:

The polymer is prepared by RAFT polymerization process. First MMA RAFT macroinitiator followed by ACN monomer.

RAFT reagent used:



Chemical Formula: C₁₇H₃₂O₂S₃
Molecular Weight: 364.6

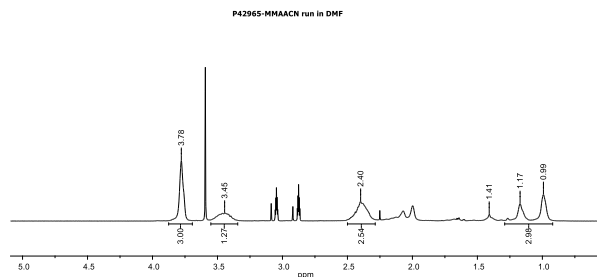
Characterization:

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

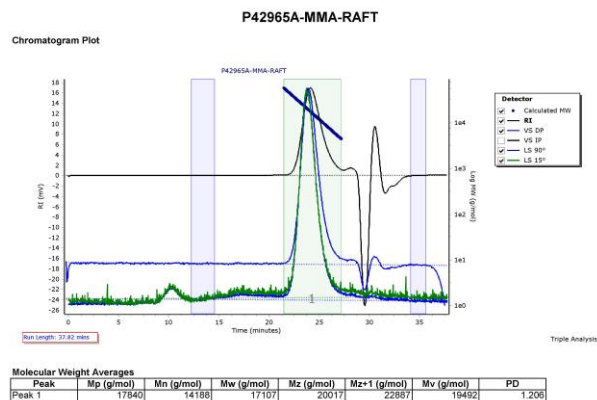
Solubility:

Polymer is soluble DMF and precipitated in methanol and hexanes.

¹H-NMR spectrum of Block Copolymer in DMF:



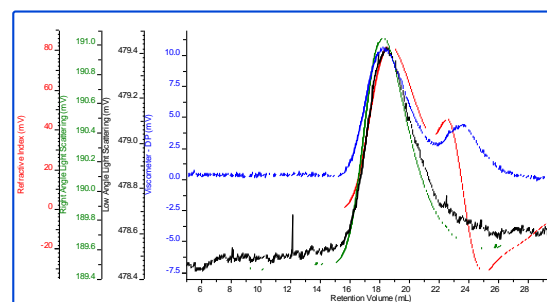
SEC elugram of the PMMA block:



SEC elugram of the Sample:

P42965-MMAACN

dn/dc	0.0970
Flow Rate	0.7000
Solvent	DMF with LiBr
Method	Calibration_2020-11-25_PMMA-85K-0003.vcm



Sample	Mn	Mw	Mp	Mw/Mn
P42965-MMAACN_1_2021	25,566	27,523	26,503	1.077

Composition from HNMR