

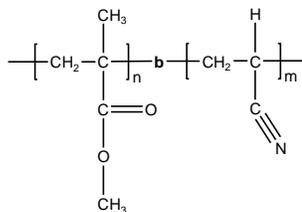
Sample Name:

Poly(Methylmethacrylate-*b*-Acrylonitrile)

Sample #: P14416-MMAACN

PMMA block rich in Syndiotactic fraction

Structure:



Composition:

Mn × 10 ³ MMA- <i>b</i> -ACN	Mw/Mn (PDI)
11.0- <i>b</i> -1.0	1.20

Synthesis Procedure:

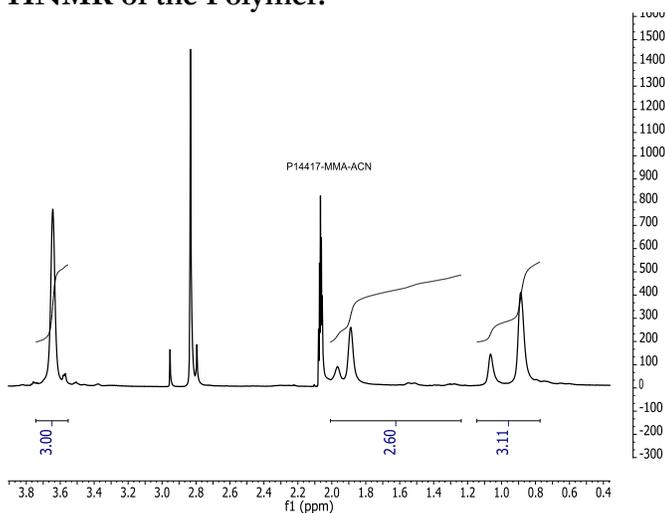
Polymer is prepared by combination of anionic polymerization and controlled-radical process.

Characterization: Block copolymer composition was calculated from ¹H-NMR spectroscopy by comparing the peak area of the Methyl ester protons at 3.6 ppm with the peak area and by subtracting the protons of backbone from MMA to Acrylonitrile.

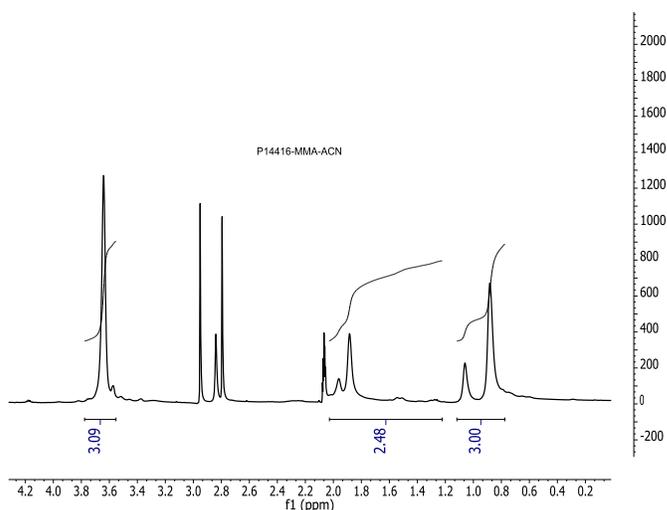
Solubility:

Polymer is soluble in THF, Chloroform, DMF, and precipitated in methanol and hexanes.

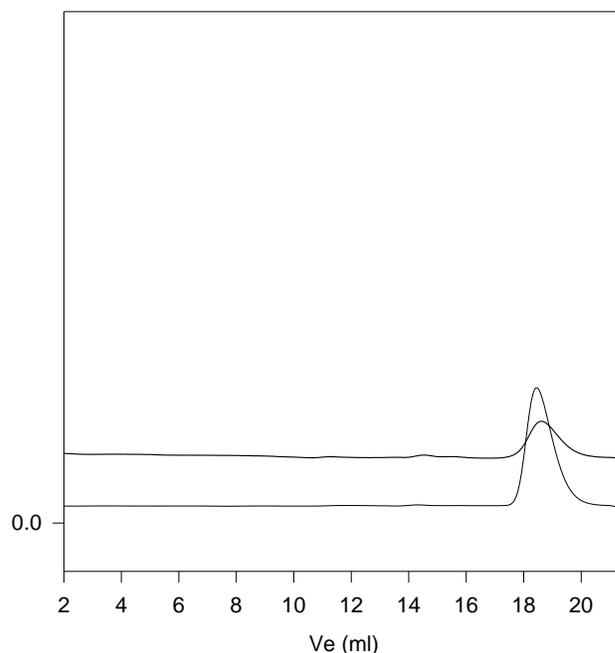
HNMR of the Polymer:



SEC profile of the block copolymer:



P14416-MMAACN



Size Exclusion Chromatography of Monohydroxy in THF

First Block of PMMA: M_n=11,000, M_w = 12,600, PI=1.15

PMMA-*b*-ACN: 11,000-*b*-1000 Mw/Mn 1.20