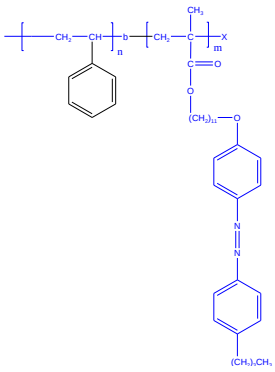
Sample Name: **Poly(Styrene-b-AzoMA)**

Sample #: **P16256-SAZoMA**

Structure:



Composition:

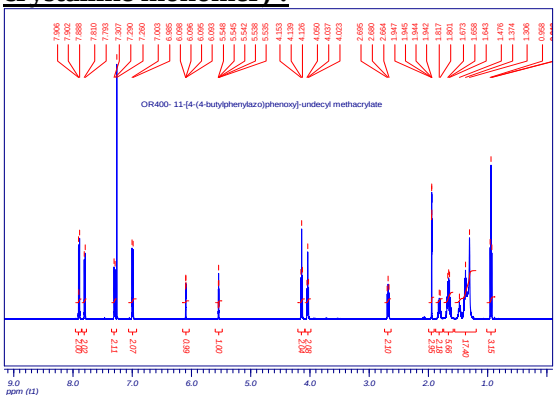
Mn x 10^3 PS-b-PAzoMA	PDI
41.0-b-20.0	1.10

Synthesis Procedure:
Poly(styrene-b-AzoMA) is prepared by anionic livening polymerization

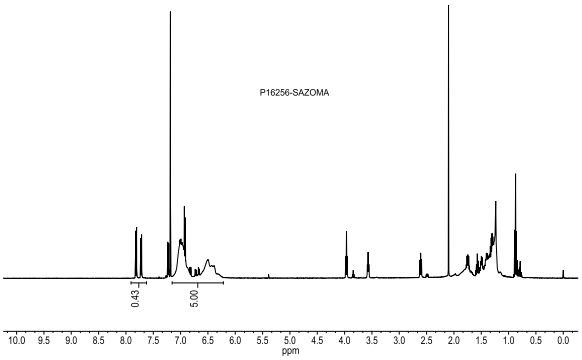
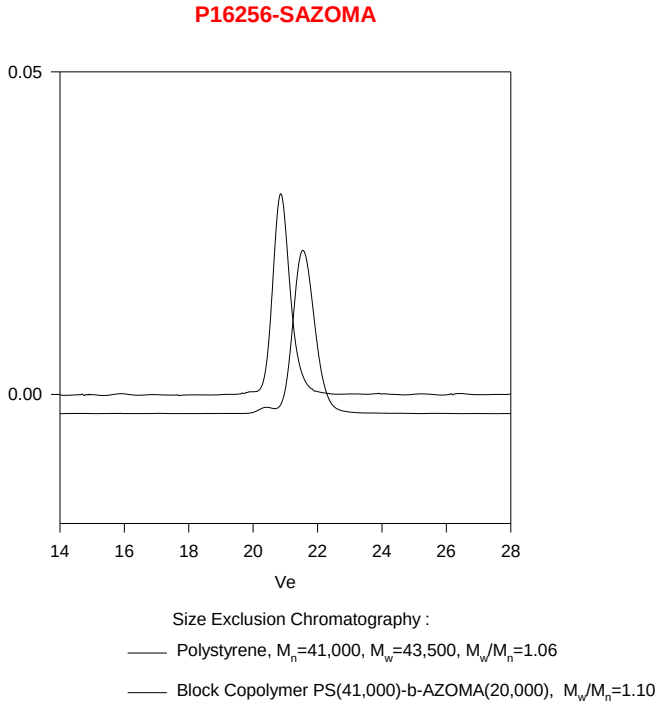
Characterization:
PS-Br and final block copolymer were analyzed by size exclusion chromatography (SEC) to obtain the molecular weight of PEG and polydispersity index (PDI) for both PEG and block copolymer. The final block copolymer composition was calculated from ^{1}H-NMR spectroscopy by comparing the peak area of the styrene protons (by subtracting the protons from AzoMA units) at about 6.2 -7.2 ppm with the methylene protons adjacent to phenoxyl ring and ester protons at about 4.1 ppm.

Solubility:
Poly(styrene-b-AzoMA) is soluble in THF, acetone, and chloroform and it precipitates out in hexane or cold methanol.

^{1}H-NMR Spectrum of the Azo-MA (Liquid crystalline monomer) :



^{1}H-NMR Spectrum of the block copolymer:



SEC of the block copolymer: