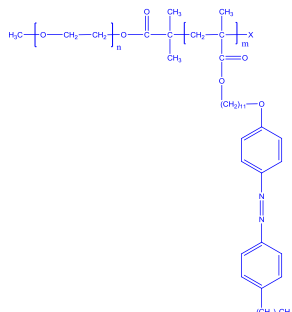


Sample Name: Poly(ethylene oxide-b-AZoMA)
(AZoMA=11-[4-(4-butylphenylazo)phenoxy]-undecyl methacrylate)

Sample #: P16248-EOAzoma

Structure:



Composition:

Mn x 10 ³ PEO-b-PAzoMA	PDI
12.0-b- 132.0	1.65

Melting point, T _{m1} (PEO):	61–73 °C
Melting point, T _{m2} (PAzoMA):	121 °C

Synthesis Procedure:

Poly(ethylene oxide-b-AZoMA) is prepared by RAFT process.

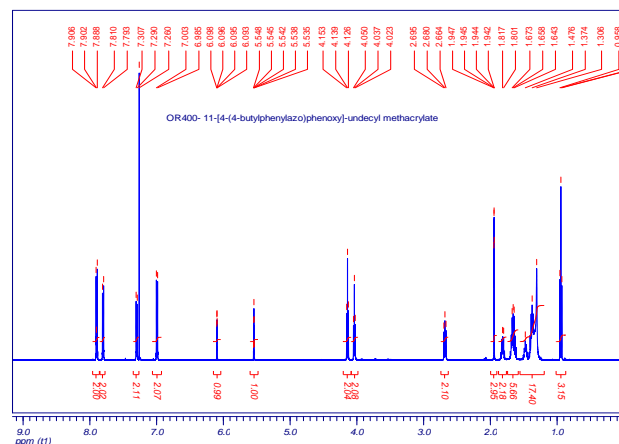
Characterization:

The product was characterized by size exclusion chromatography (SEC) and ¹H NMR. The compositions and molecular weight were determined by HNMR analysis. The SEC was used to determine its distribution and absence of PEG starting polymer.

Thermal analysis:

Thermal analysis was performed on TA Instruments Q100 differential scanning calorimeter (DSC) under a nitrogen atmosphere. The glass transition temperature (T_g), melting point (T_m) and crystallization temperature (T_{cr}) of the copolymer were measured at a scan rate of 10°C/min shortly after creating thermal history of the sample.

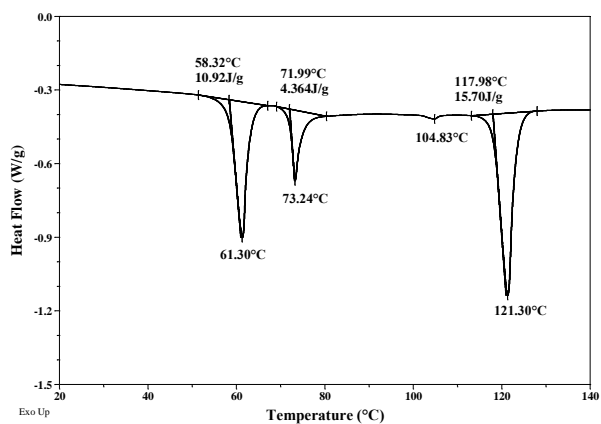
¹H-NMR Spectrum of the LC monomer:



DSC thermogram of the polymer (2nd heating scan, 10°C/min):

Sample: P16248_EOAzoMA
Size: 11.3000 mg

File: P16248-EOAzoMA.001



DSC thermogram (cooling and heating scans, 10°C/min):

Sample: P16248_EOAzoMA
Size: 11.3000 mg

File: P16248-EOAzoMA.001

