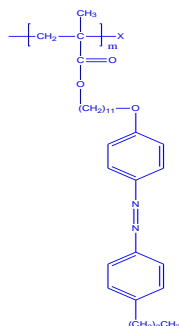


## Sample Name: Poly(AzoMA)

(AZoMA=11-[4-(4-butylphenylazo)phenoxy]-undecyl methacrylate)

Sample #: P5855-AzoMA

### Structure:



### Composition:

Mn × 10 <sup>3</sup>	PDI
9.0	1.25
T <sub>m</sub> (°C): 95	T <sub>c</sub> (°C): 93

### Synthesis Procedure:

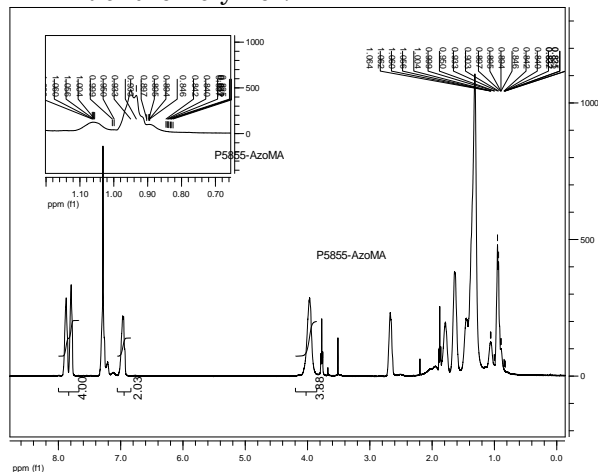
Poly(AzoMA) is prepared by anionic polymerization using diphenyl methyl potassium initiator.

**Characterization:** Polymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight. Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The melting temperature (T<sub>m</sub>) was taken as the maximum of the endothermic peak whereas the crystallization temperature (T<sub>c</sub>) was considered as the minimum of the exothermic peak.

### Solubility:

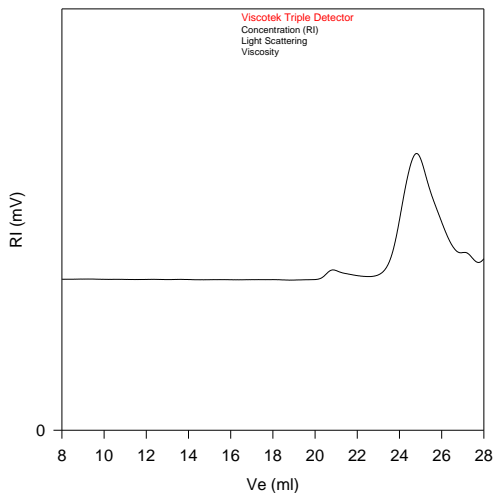
Poly(AzoMA) is soluble in THF, acetone, and chloroform and it precipitates out in hexane or cold methanol.

### <sup>1</sup>H NMR of the Polymer:



### SEC of the Product:

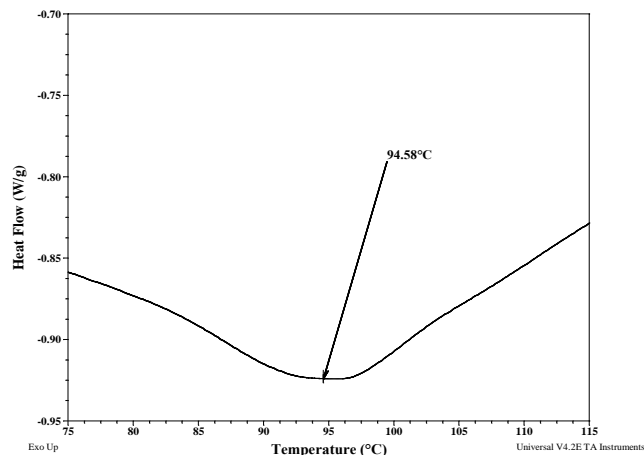
#### P5855-AZOMA



Size Exclusion Chromatography of Polymer:

— PAZOMA : M<sub>n</sub> = 9000 M<sub>w</sub>/M<sub>n</sub> = 1.25

### Melting curve for the polymer:



### Crystallization curve for the polymer:

