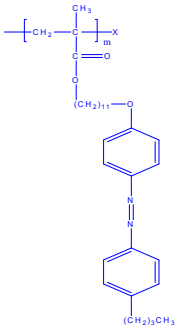
Sample Name: **Poly(AzoMA)**

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

Sample #: **P9588-AzoMA**

Structure:



Composition:

Mn × 10^3	PDI
24.0	2.4
Microstructure	Syndio:heter:iso 63:37:0

Synthesis Procedure:

Poly(AzoMA) is prepared by anionic polymerization using alcolate initiator.

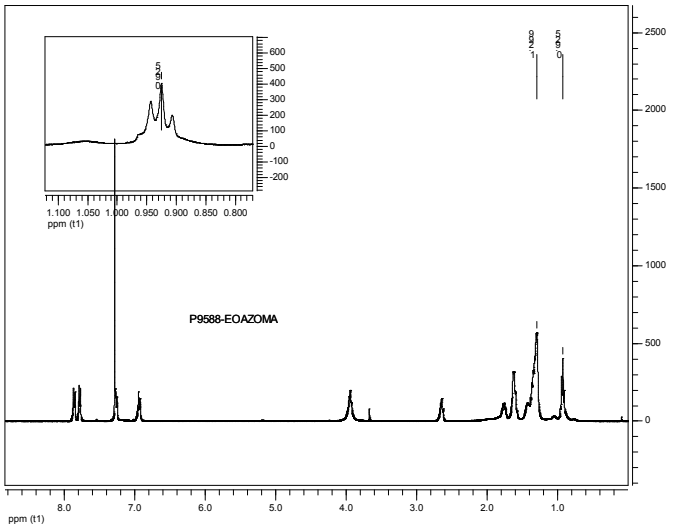
Characterization:

Polymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight.

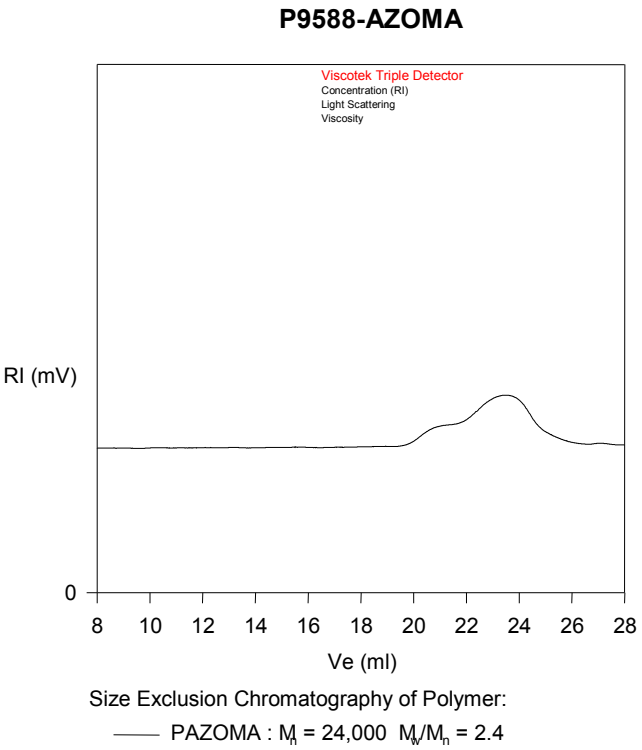
Solubility:

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

^{1}H NMR of the Polymer:



SEC of the Product:



Size Exclusion Chromatography of Polymer:

—— PAZOMA : M_n = 24,000 M_w/M_n = 2.4

Thermal analysis of the sample# P9588-AzoMA

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min.The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

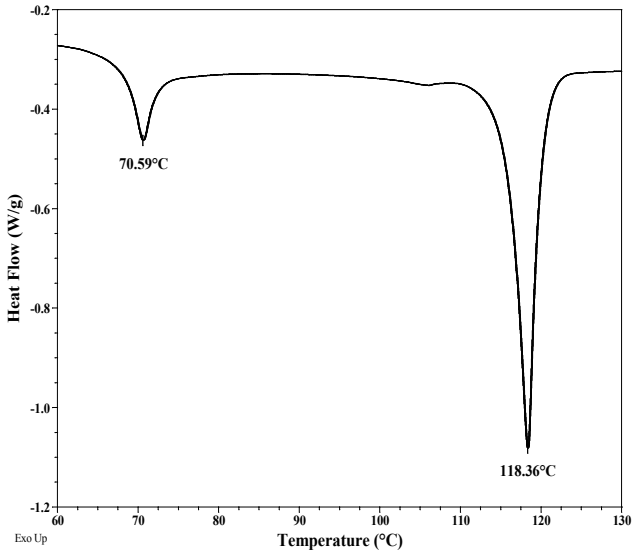
Melting and crystallization curve for the sample

The melting temperature (T_m) was taken as the maximum of the endothermic peak where as the crystallization temperature (T_c) was considered as the minimum of the exothermic peak.

Thermal analysis results at a glance

Sample	T_m (°C)	T_c (°C)	T_g (°C)
AzoMA	71/118	66/113	-

Melting curves for AzoMA



Crystallization curve for AzoMA