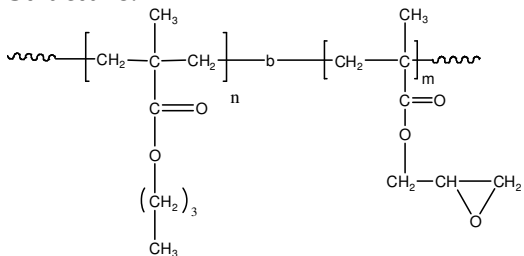


**Sample Name:**

Poly( n-butyl methacrylate-b-Glycidyl methacrylate)

**Sample #:** P9471-nBuMAGMA**Structure:****Composition:**

Mn × 10 <sup>3</sup> nBuMA-b-GMA	PDI
23.0-b-8.0	1.07
T <sub>g</sub> for nBuMA block: 27 °C	T <sub>g</sub> for GMA block: 87 °C

**Synthesis Procedure:**

Poly(n-butyl methacrylate-b-Glycidyl methacrylate) block copolymer is synthesized by living anionic polymerization with sequential addition of n-butyl methacrylate and -Glycidyl methacrylate. The obtained polymer was precipitated in methanol/acidic.

**Characterization:**

SEC analysis of the obtained block copolymer in THF in presence of triethyl amine as eluent .

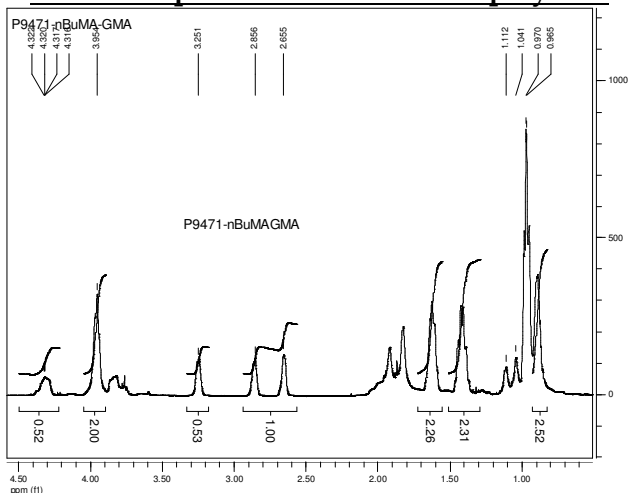
The final block copolymer composition by <sup>1</sup>H-NMR spectroscopy in CdCl<sub>3</sub> Block copolymer PDI is determined by SEC.

**Thermal analysis:**

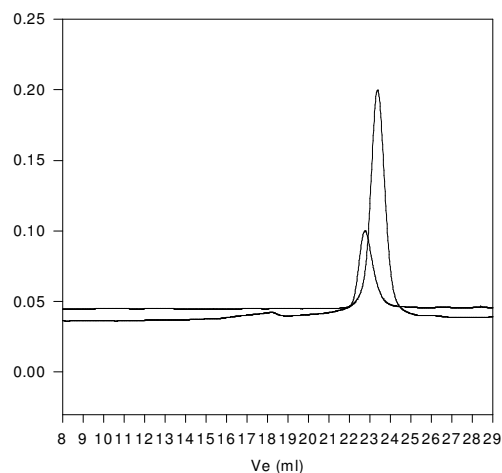
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T<sub>g</sub>).

**Solubility:**

Polymer is soluble in THF and CHCl<sub>3</sub>.

**<sup>1</sup>H-NMR Spectrum of the block copolymer:****SEC of the block copolymer:**

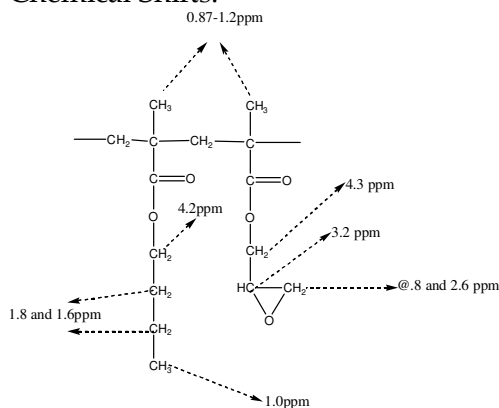
P9471--nBuMAGMA



Size exclusion chromatography of

1. Poly nBuMA: Mn 23000 Mw/Mn 1.08

Poly(nBuMA)-b- Poly (GMA) Mn 23,000-b-8000 Mw/Mn 1.07

**Chemical Shifts:****DSC thermogram for the polymer:**