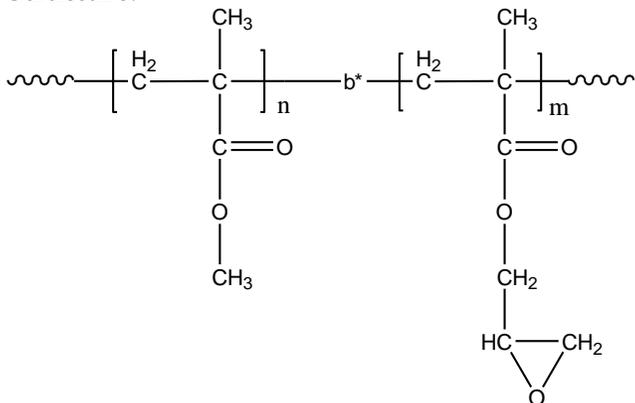


### Sample Name:

Poly( Methyl methacrylate-b-Glycidyl methacrylate)

Sample #: P18478-MMAGMA

Structure:



### Composition:

$M_n \times 10^3$	PDI
MMA-b-GMA	
5.5b-14.5	1.32
PMMA Microstructure	Sndio:hetero:iso 73.0:-20:7.0

### Synthesis Procedure:

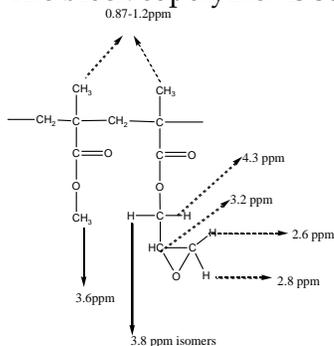
Poly(Methyl methacrylate-b-Glycidyl methacrylate) block copolymer is synthesized by group transfer polymerization with sequential addition of methyl methacrylate and -Glycidyl methacrylate. The obtained polymer was precipitated into methanol.

### Characterization:

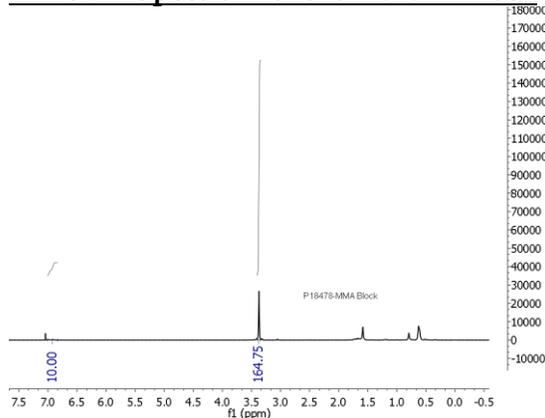
SEC analysis of the obtained block copolymer was carried out in THF in presence of triethyl amine as eluent and using light scattering detector to determine molecular weight and polydispersity. The composition of block copolymer by  $^1\text{H-NMR}$  spectroscopy in  $\text{CdCl}_2$  by comparing methyl group in MMA block at 3.6 ppm and methylene group in GMA block at 2.8 and 2.6 ppm.

### Solubility:

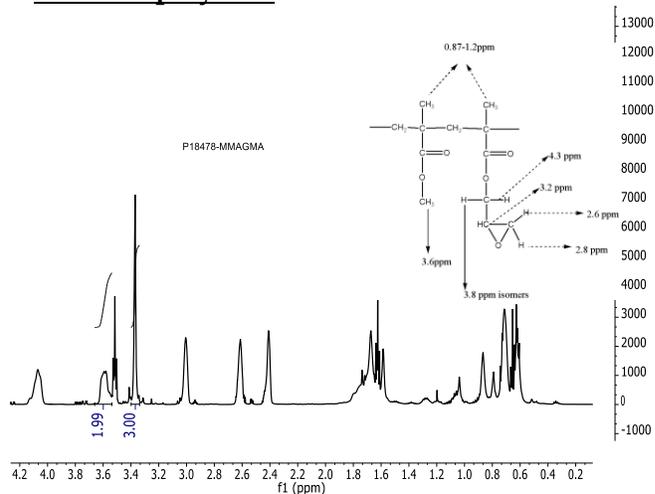
The block copolymer is soluble in THF and  $\text{CHCl}_3$ .



### $^1\text{H-NMR}$ Spectrum of the PMMA Block



### Block Copolymer:



### SEC of the block copolymer:

Sample ID: P18478-MMAGMA

Concentration (mg/mL)	1.9271
Sample dn/dc (mL/g)	0.0850
Method File	PS80K-Feb10-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1

