

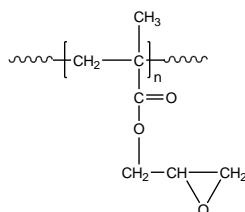
Product Profile

Identification

Product Name: Poly(glycidyl methacrylate)

Product Lot Number: P14092-R-GMA

Product Chemical Architecture:

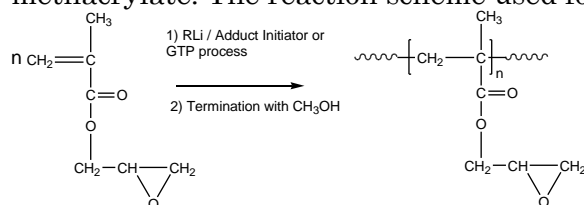


Composition:

| | |
|---------------------|---------------------|
| Mn (g/mole) | 85,000 |
| Mw (g/mole) | 123,000 |
| Mw/Mn | 1.45 |
| dn/dc (mL/g) | 0.084 in THF |

Method of Synthesis

Poly(glycidyl methacrylate) is obtained by living anionic /GTP polymerization of glycidyl methacrylate. The reaction scheme used for the polymer synthesis is shown below:



Solubility in different solvents

| | | | |
|-------------|---|-------------------|---|
| THF | √ | Alcohol | X |
| 1,4-dioxane | √ | CHCl ₃ | √ |

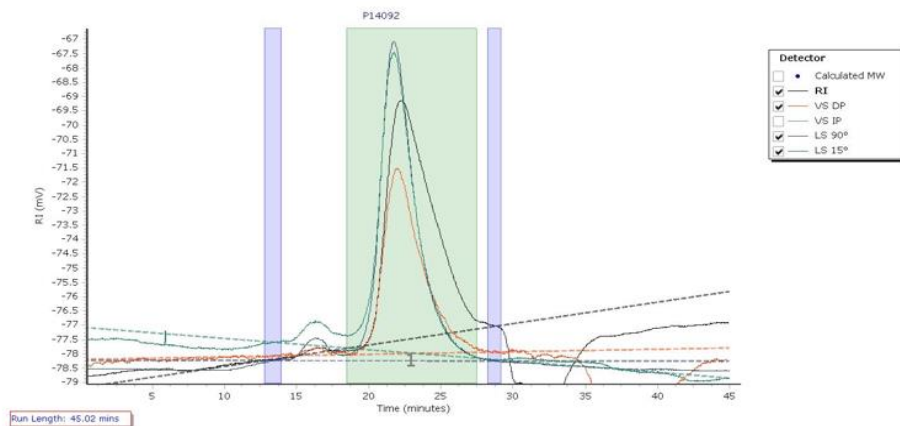
Validation of Architecture

A. Gel Permeation Chromatography (GPC), SEC- Profile:

Molecular weights were determined by Agilent Technologie 1260 Infinity II GPC/SEC System equipped with Triple detector (RI, Viscometer, RALS 90o and LS 15o) and three columns (PLgel, 7.5x300 mm, 5µm-10µm, 105-106Å). THF (stabilized BHT) with 1%(v/v%) TEA was the eluent. The flow rate was 1.0 ml/min.

P14092

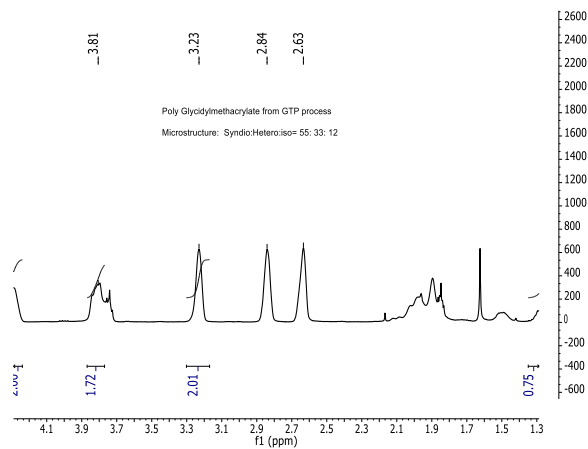
Chromatogram Plot



Molecular Weight Averages

| Peak | Mp (g/mol) | Mn (g/mol) | Mw (g/mol) | Mz (g/mol) | Mz+1 (g/mol) | Mv (g/mol) | PD |
|--------|------------|------------|------------|------------|--------------|------------|-------|
| Peak 1 | 151125 | 84764 | 122612 | 158731 | 188794 | 150517 | 1.447 |

B. ¹H NMR of the Polymer:



C. DSC thermogram for the polymer:

