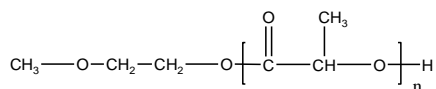


Sample Name: Polylactide

Sample #: P5808d-LA (D/L-Form)

Structure:

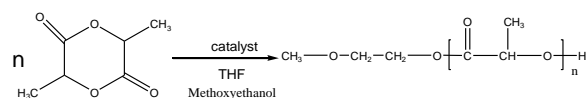


Composition:

$M_n \times 10^3$	PDI
16.0	1.3
T_g (°C)	43 oC

Synthesis Procedure:

The polymerization of D/L-Lactide was initiated with Tin catalyst and the reaction was carried out without solvent.



Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography with light scattering and viscometer detectors.

Thermal analysis:

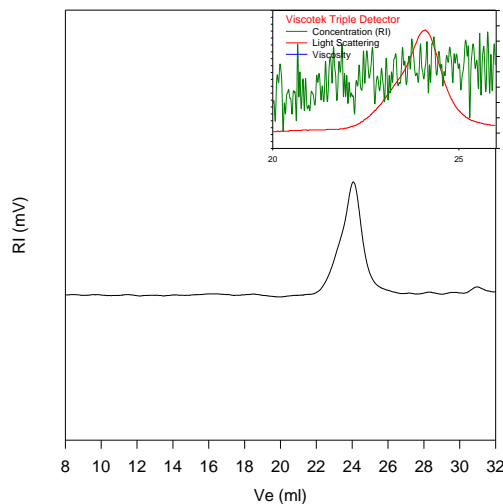
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:

Poly(DL-lactide) is soluble THF, CHCl_3 and CH_2Cl_2 . The polymer is insoluble in methanol, hexane and ether.

SEC of Homopolymer:

P5808d-LA (D/L form)



Size Exclusion Chromatography of Poly lactide (L form)

$M_n = 16,000$, $M_w = 20,800$, $M_w/M_n = 1.3$
Solution Viscosity in THF at 35 oC: 0.267dl/g
dn/dc in THF at 35 oC: 0.046 ml/g
Rgw: 12.15nm

DSC thermogram for the sample:

