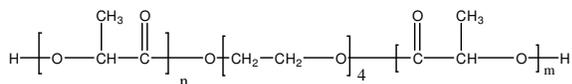


Sample Name: Dihydroxyl ended polylactide

Sample #: P7328-HOLA0H (DL-Form)

Structure:

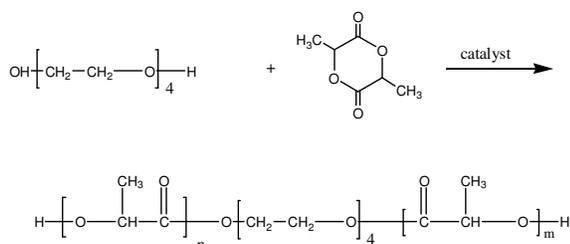


Composition:

$M_n \times 10^3$	PDI
5.3	1.18
T_g	36°C

Synthesis Procedure:

The polymerization of 3, 6-dimethyl-1,4-dioxane-2,5-dione was initiated with catalyst, and the reaction is shown as below:



Characterization:

The M_n is calculated from NMR by comparing the peak area of the ethylene glycol protons and end CH in polylactide at about 4.2 ppm with the polylactide protons at about 5.1 ppm and polydispersity index (PDI) are obtained by size exclusion chromatography.

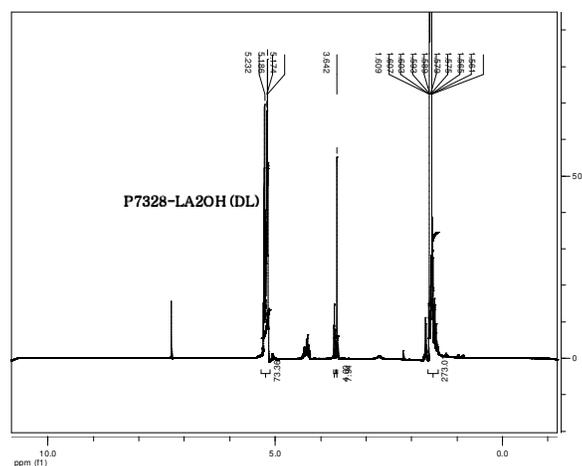
Thermal analysis:

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:

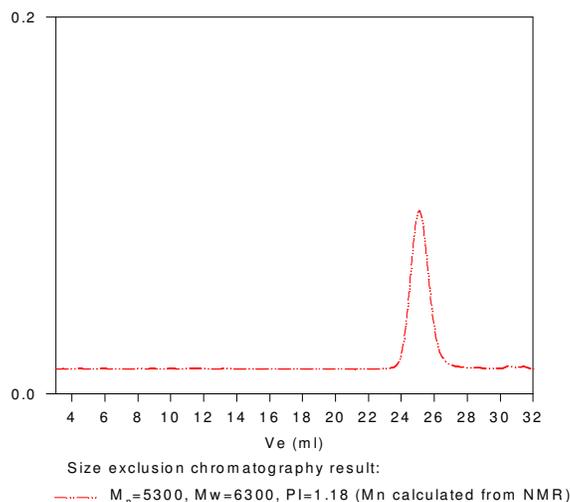
The polymer is soluble in toluene, THF, CHCl_3 and CH_2Cl_2 . The polymer is insoluble in methanol, hexane and ether.

NMR of polymer:



SEC of polymer:

P7328-LA2OH (DL form)



DSC thermogram for the sample:

