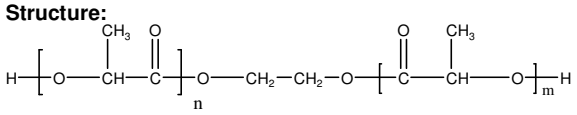
Sample Name: **Dihydroxyl ended polylactide**

Sample #: **P7330-HOLAOH (DL-Form)**

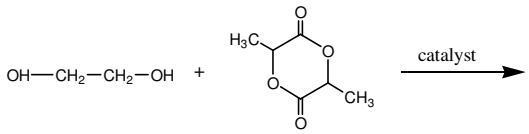
Structure:

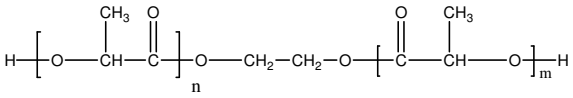


Composition:

Mn x 10^3	PDI
5.5	1.1

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



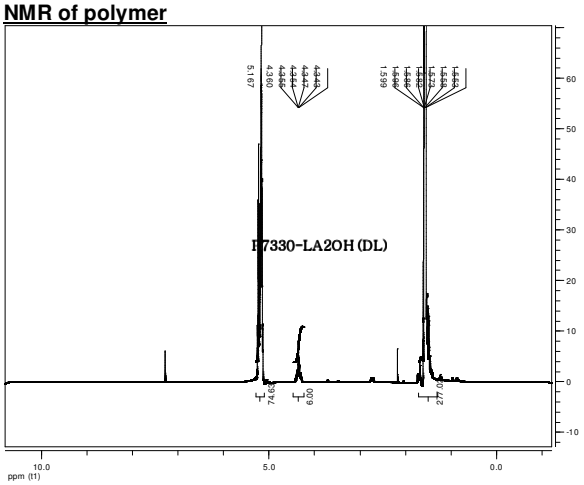


Characterization:

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

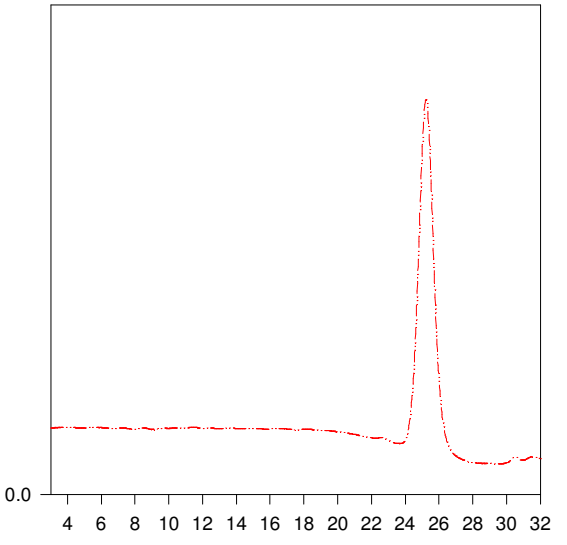
Solubility:
The polymer is soluble in toluene, THF, $CHCl_3$ and CH_2Cl_2.
The polymer is insoluble in methanol, hexane and ether.

NMR of polymer



SEC of polymer:

P7330-LA2OH (DL form)



Size exclusion chromatography result:

M_n=5500, Mw=6000 PI=1.1 (Mn calculated from NMR)