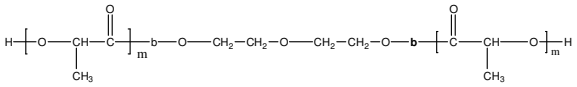
Sample Name: **Dihydroxyl ended polylactide**

Sample #: **P7379-HOLAOH (DL-Form)**

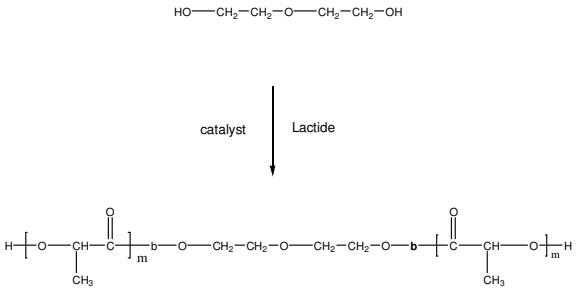
**Structure:**



**Composition:**

| Mn x $10^3$ | PDI |
|---|---|
| 7.3 | 1.16 |

**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:

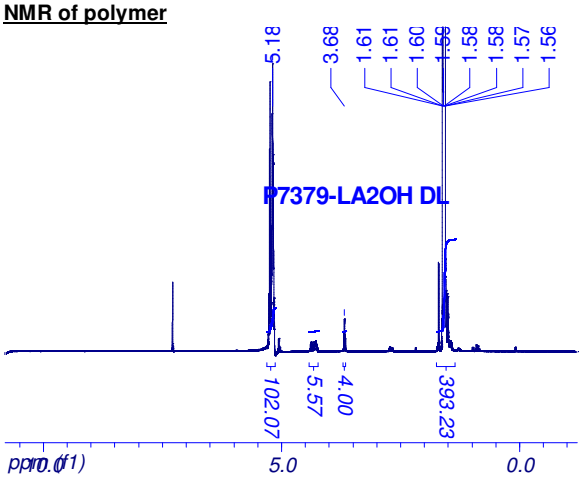



**Characterization:**

The Mn is calculated from NMR by comparing the peak area of the ethylene glycol protons at about 3.6 ppm with the polylactide protons at about 5.1 ppm and polydispersity index (PDI) are obtained by size exclusion chromatography.

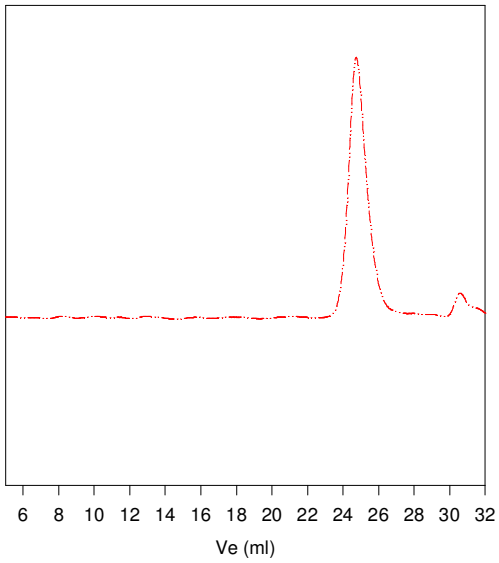
**Solubility:**
The polymer is soluble in toluene, THF, $CHCl_3$ and $CH_2Cl_2$.
The polymer is insoluble in methanol, hexane and ether.

**NMR of polymer**




**SEC of polymer:**

**P7379-LA2OH (DL form)**




Size exclusion chromatography result:

$M_n$=7300, Mw=8500, PI=1.16 (Mn calculated from NMR)