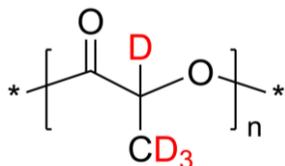


**Sample Name: Deuterated Poly(D-lactide-d4)**

**Sample #: P60220A-d4LA**

**Structure:**



**Composition:**

$M_n \times 10^3$	PDI
75.5	1.25

D Atom %	>95
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**Synthesis Procedure:**

The polymerization of d8 deuterated 3,6-dimethyl-1,4-dioxane-2,5-dione was carried out in bulk.

**Purification:**

The polymeric solution was precipitated from  $\text{CHCl}_3$  and/or acetone into a large excess of hexane.

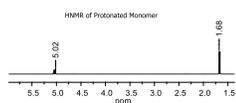
**Solubility:**

Deuterated Poly (lactide) is soluble in toluene, THF,  $\text{CHCl}_3$  and  $\text{CH}_2\text{Cl}_2$ . The polymer is insoluble in methanol, hexane and ether.

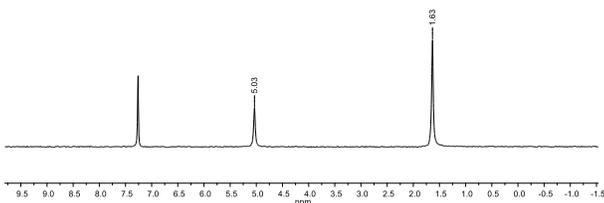
**Characterization:**

The molecular weight is obtained from  $^1\text{H}$  NMR and  $\text{D}_2$  NMR and polydispersity index (PDI) was obtained by size exclusion chromatography.

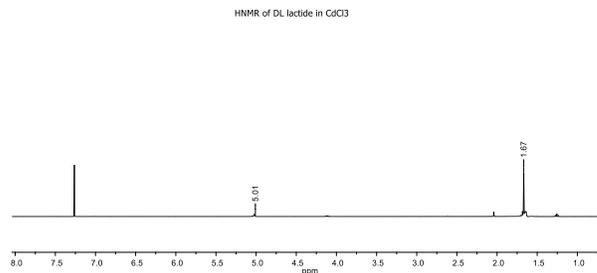
**$^2\text{H}$  NMR spectrum of the monomer -d8:**



D NMR of Lactide monomer run in  $\text{CdCl}_3$   
Lot # P60218 D atom % >95%



**$^1\text{H}$  NMR spectrum of the monomer in  $\text{CdCl}_3$ :**



**SEC of deuterated polylactide:**

