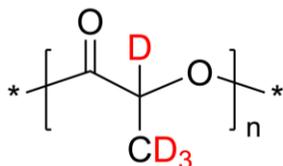


Sample Name: Deuterated Poly(D-lactide-d4)

Sample #: P60220-d4LA

Structure:



Composition:

$M_n \times 10^3$	PDI
42.5	1.33

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 CHCl_3 and/or acetone into a large excess of hexane.

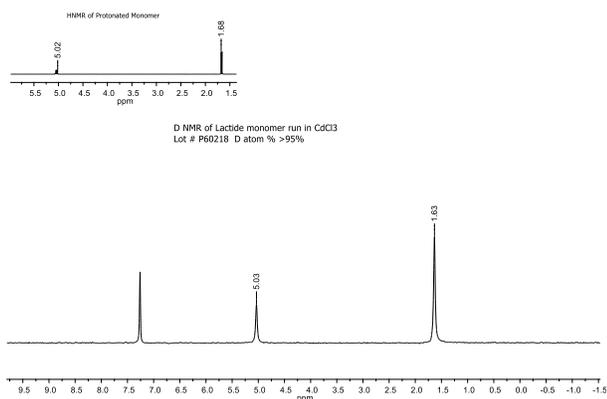
Solubility:

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

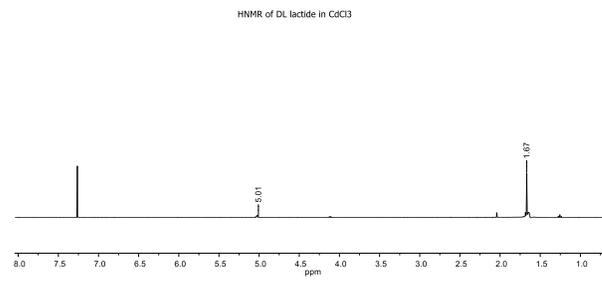
Characterization:

The molecular weight is obtained from ^1H NMR and D_2 NMR and polydispersity index (PDI) was obtained by size exclusion chromatography.

^2H NMR spectrum of the monomer -d8:

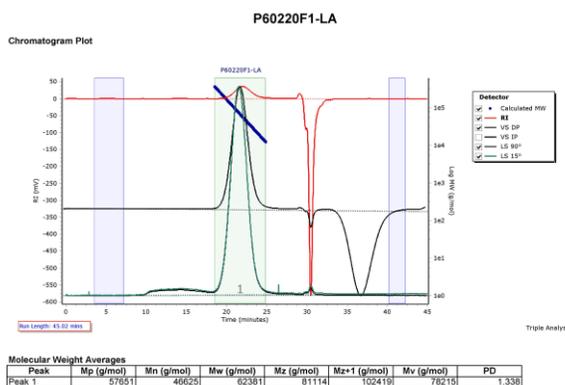


HNMR spectrum of the monomer in CdCl_3 :



SEC of deuterated polylactide:

Agilent GPC/SEC Software



Heating (down) and cooling (up) scans, 10 C/min.

$T_m \sim 97^\circ\text{C}$

$T_g \sim 0^\circ\text{C}$

