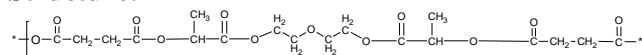


Sample Name:
Polyanhydride based on polylactide (DL form)

Sample #: P41140A-LA(DL)-Anh

Structure:

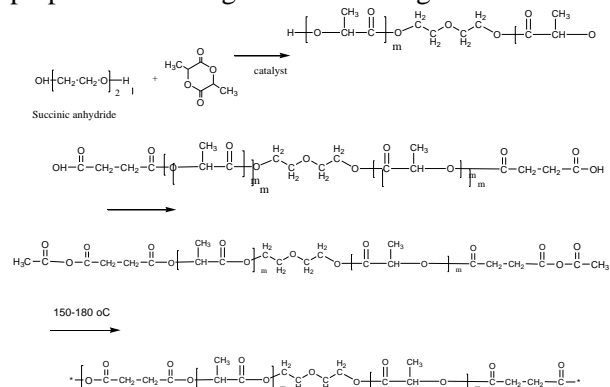


Composition:

$M_n \times 10^3$ (g/mol) (total)	14.0
M_w/M_n	1.25
M_n of L polylactide chain	7,500
Number of repeating polylactide chain	2 by GPC
Number of repeating polylactide chain based on terminal end groups	4 by HNMR

Synthesis Procedure: Center block Diethylene glycol

The polyanhydride based on polylactide (DL) is prepared according to the following reaction scheme:



Characterization:

The product was characterized by size exclusion chromatography (SEC) runs in DMF and ^1H NMR solution viscosity in CdCl_3 .

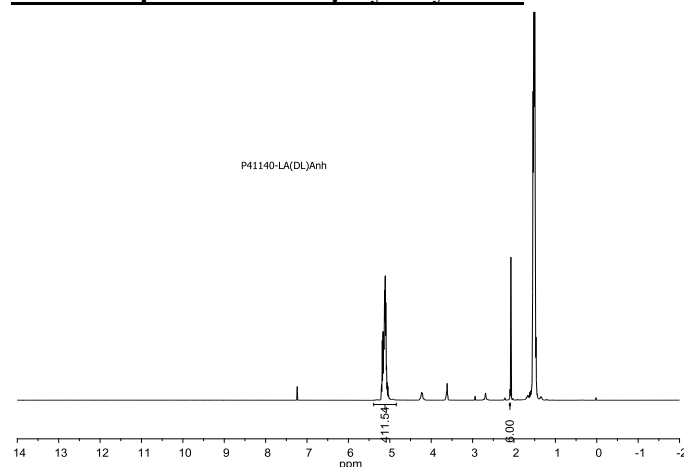
Solubility:

The polyanhydride is soluble in chloroform, DMF. And it precipitated out from ether and hexanes.

Following Photo shows that Fiber can be drawn by melt process, the obtained fiber is brittle:



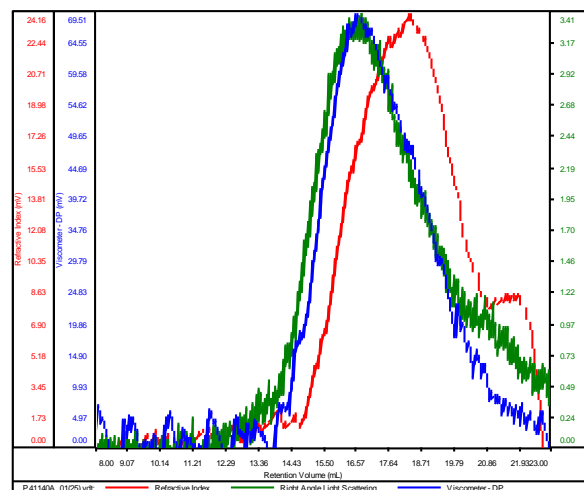
^1H NMR spectrum of the polyanhydride:



SEC elugram of the polyanhydride:

P41140A-LA(DL)anh

Conc	2.4340
dn/dc	0.1650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS-80k_2018-04-02-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P41140A_01(25).vdt	13,917	17,195	11,357	1.236	1.3391

References:

S. K. Varshney, Olexander Hnojewyl, J.X. Zhang, and Patrick Rivelli, US Pat 7,674,285 B2 2010 Poly anhydride Polymers and Their Uses inn Biomedical Devices And 2009/0253806A1