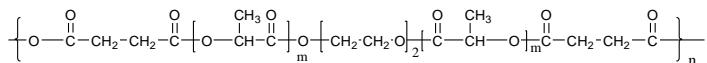


Sample Name:  
**Polyanhydride based on polylactide (DL form)**

Sample #: P4980A-LA-Anh

**Structure:**

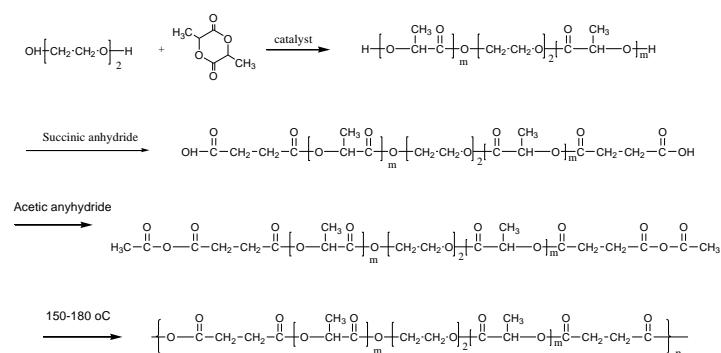


**Composition:**

$M_n \times 10^3$ (g/mol) (total)	41.5
$M_w/M_n$	1.7
$M_n$ of polylactide chain	5000
Number of repeating polylactide chain	$n = 8$

**Synthesis Procedure:**

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



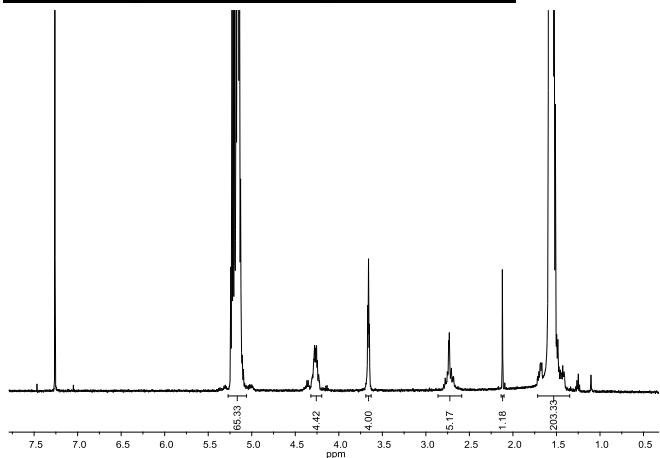
**Characterization:**

The polymer is characterized by size exclusion chromatography (SEC) and  $^1\text{H-NMR}$ . The molecular weight obtained is relative to polystyrene standard.

**Solubility:**

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

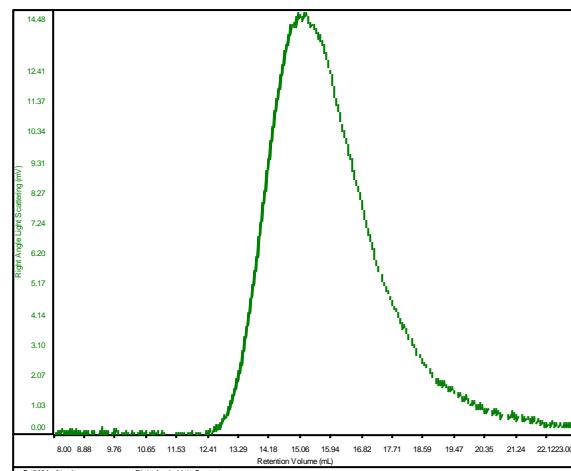
**$^1\text{H NMR spectrum of the polyanhydride:}$**



**SEC elugram of the polyanhydride:**

P4980A

Conc	2.1001
d <sub>n</sub> /d <sub>c</sub>	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
P4980A_01.vdt	41,553	69,318	43,015	1.668	1.7875

*For details see our Patents:*

*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*