

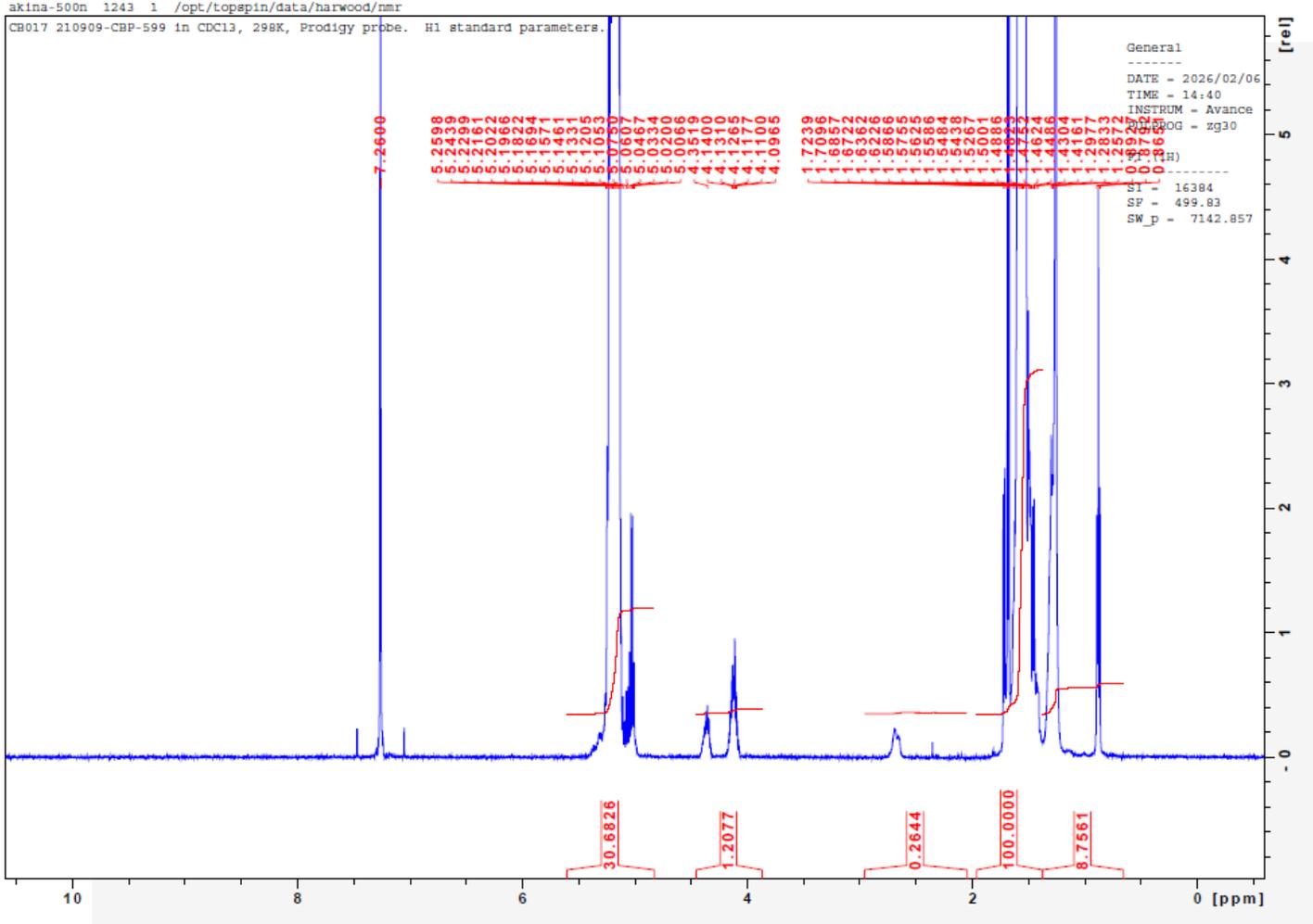
No. CB017

Certificate of Analysis



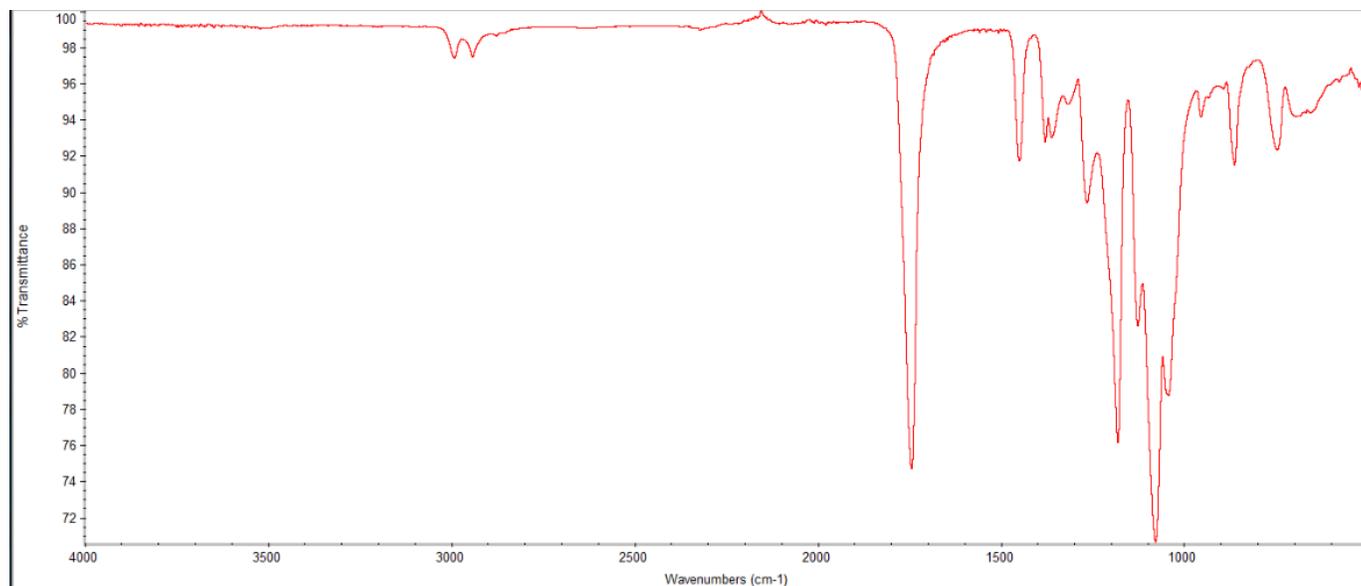
Product Name: Poly(D,L-Lactide) I.V. 0.16 – 0.24 dl/g, ester endcap (PDL 02)
(Lot#: 210909CBP-599)

H-NMR



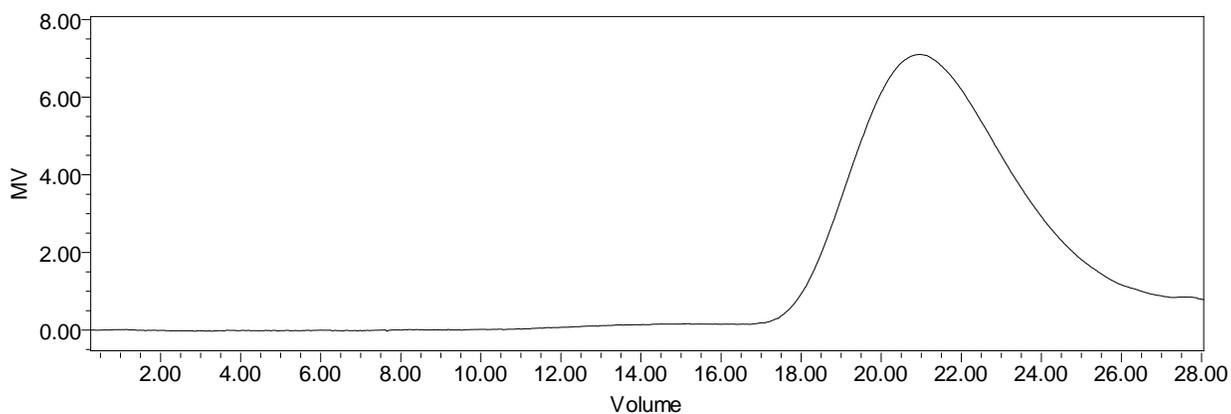
H-NMR Spectrum of copolymers in CDCl3 (NMReady-60e, Nanalysis 60 MHz) NMR of PDLLA copolymer

FTIR



FTIR Analysis: Collected from IS5 ID7-ATR spectrometer (Thermo Scientific) and analyzed in transmission mode.

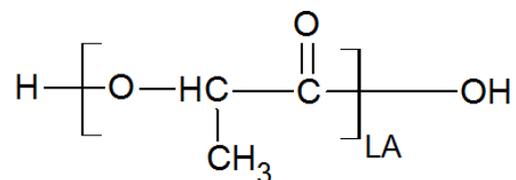
GPC-ES



Polymer	M _n (from GPC)	M _w (from GPC)	PDI
PDLLA	12,425	17,324	1.39

GPC-ES Analysis Method: Waters Breeze 2 system with 1 ml/min THF flow across three GPC columns. Detection via refractive index, calibrated against polystyrene standards.

Structure of copolymers



Manufacturer Provided Data

Assay	Specification	Result
Tg, DSC, 10 °C/min	30-40 °C	36.2 °C
Tin content	<50ppm	13 ppm
Water content ¹	<0.50%	0.10%
Residual monomer, DL Lactide	<2.4%	1.6%
Inherent Viscosity ²	0.16-0.24 dL/g	0.19 dL/g
Endotoxin	<6 EU/g	<0.25 EU/g
Residual solvent, total	<2.4%	1.9 %
Residual solvent, Toluene	<890 ppm	180 ppm
Residual solvent, Ethyl Acetate	<5000 ppm	4 ppm

1 – Measured by titration

2 – Measured at 25 °C in Chloroform c=1 g/dL

Approved By: <i>Amie Tyler</i> Quality Manager
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