

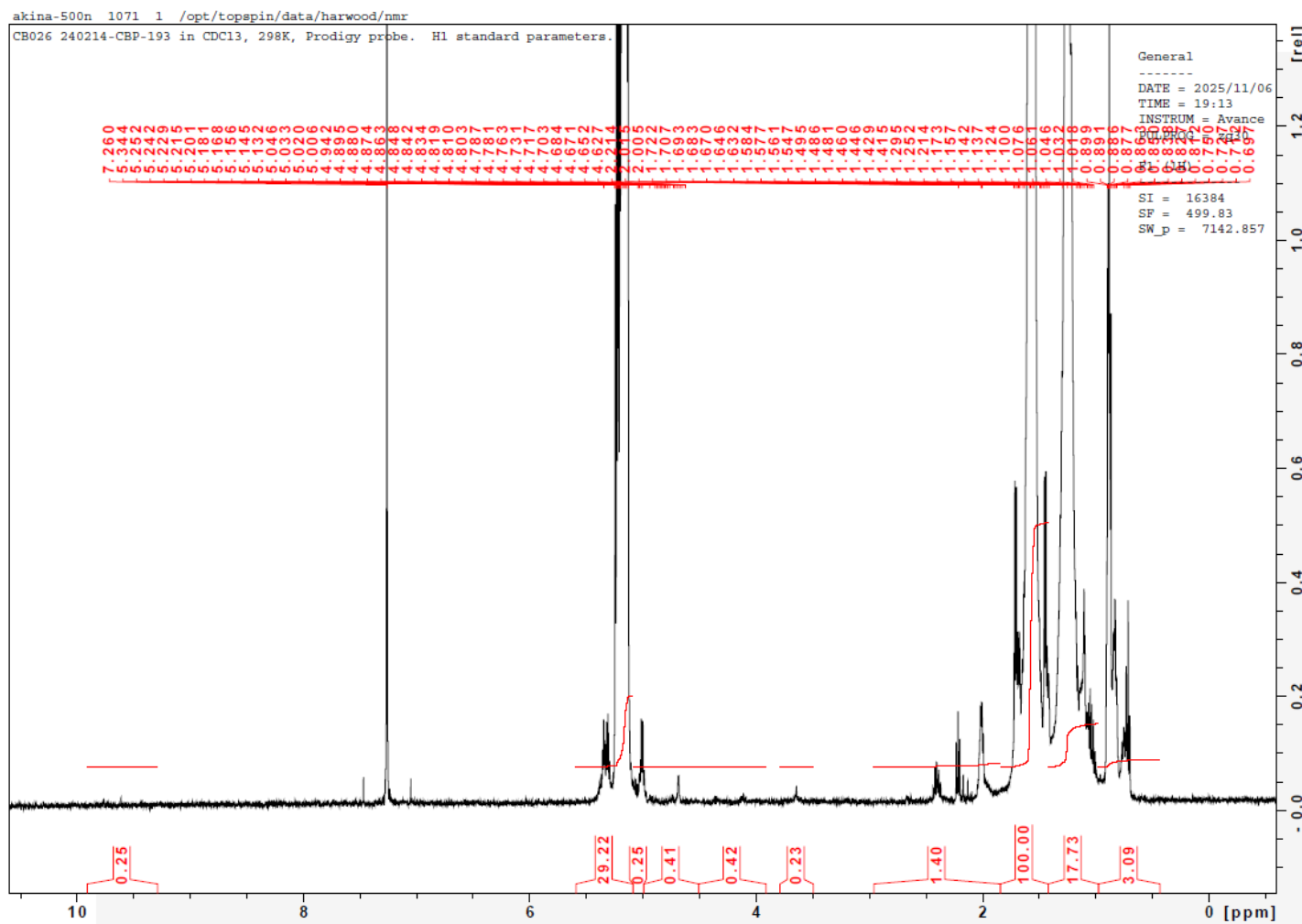
No. CB026

Certificate of Analysis



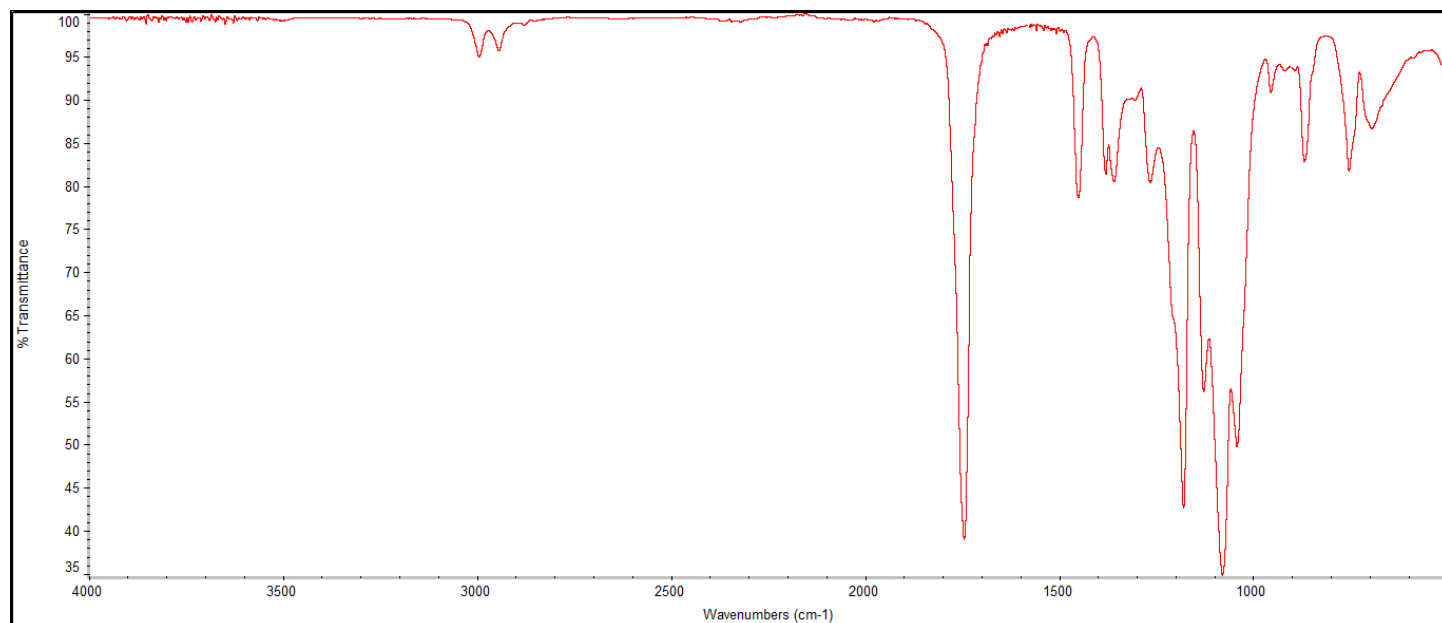
Product Name: Poly(L-Lactide, D,L-Lactide) L:DL 70:30 I.V. 3.30 – 4.30 dl/g, ester endcap (PLDL 7038) (Lot # 240214CPB-193)

H-NMR



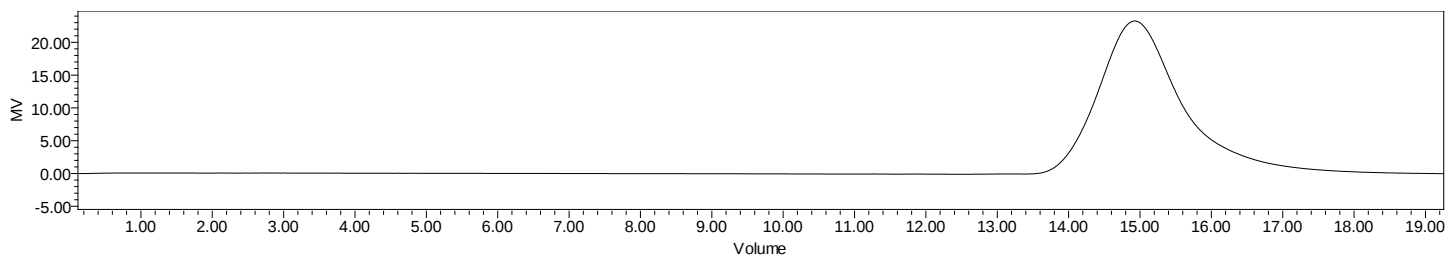
H-NMR Spectrum of copolymers in CDCl₃ (NMReady-60e, Nanalysis 60 MHz) NMR of PLDL copolymer.

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
PLDL	307,598	450,929	1.47

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.

DSC

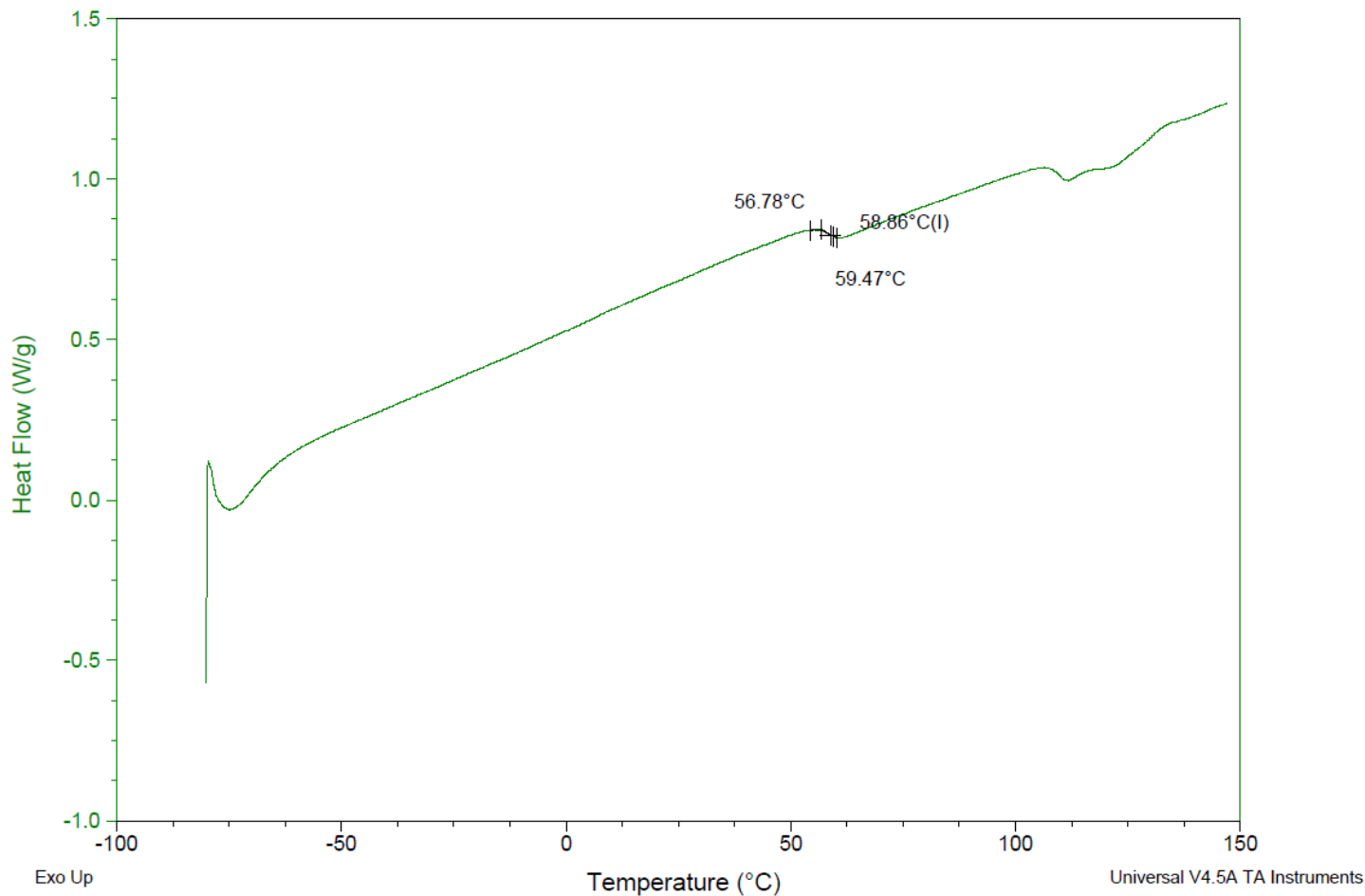
Sample: CB026 240214CBP-193
Size: 1.7000 mg
Method: Ramp

DSC

File: C:\...\COA\CB026 240214CBP-193.001

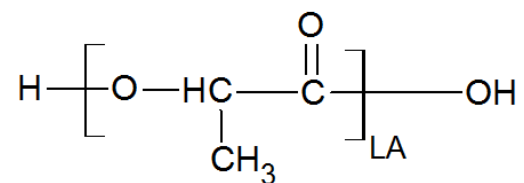
Run Date: 07-Nov-2025 12:38

Instrument: DSC Q2000 V24.11 Build 124



DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 58.86 °C

Structure of copolymers



Manufacturer Provided Data

Assay	Specification	Result
Melting onset, DSC, 10 °C/min	100.0 °C	109.3 °C
Melting peak, DSC, 10 °C/min	130.0 °C	114.1 °C
Tin content	<50ppm	20 ppm
Water content ¹	<0.50%	0.06%
Residual monomer, Total	<0.10%	0.00%
Inherent Viscosity ²	3.30-4.30 dL/g	4.09 dL/g
Residual solvent, Total	<0.10%	0.01 %
Residual solvent, Toluene	<890 ppm	<0 ppm
Residual solvent, Acetone	<5000 ppm	42 ppm

1 – Measured by titration

2 – Measured at 25 °C in Chloroform c=0.1 g/dL

Approved By:
Amie Tyler
 Quality Manager