

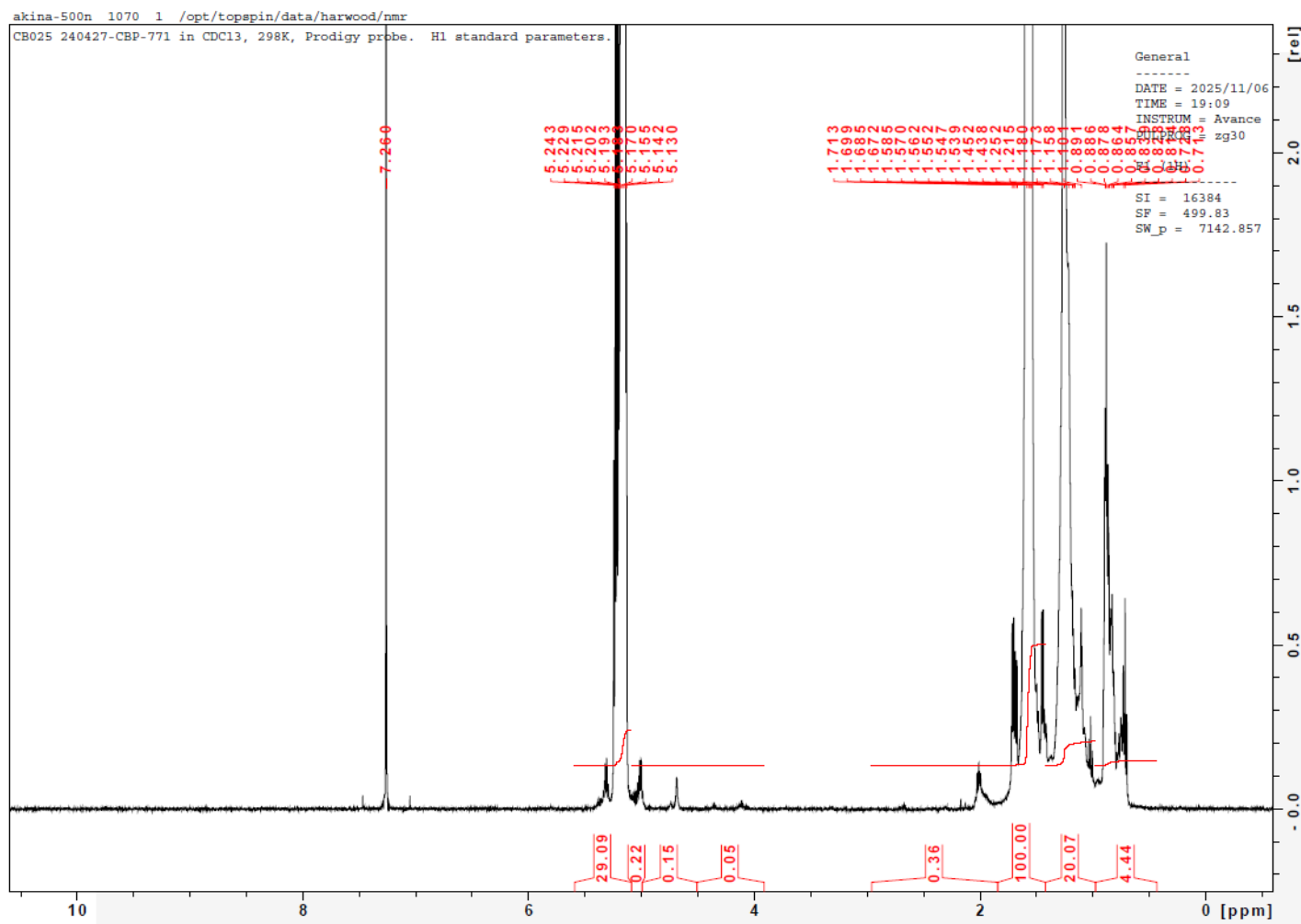
No. CB025

Certificate of Analysis



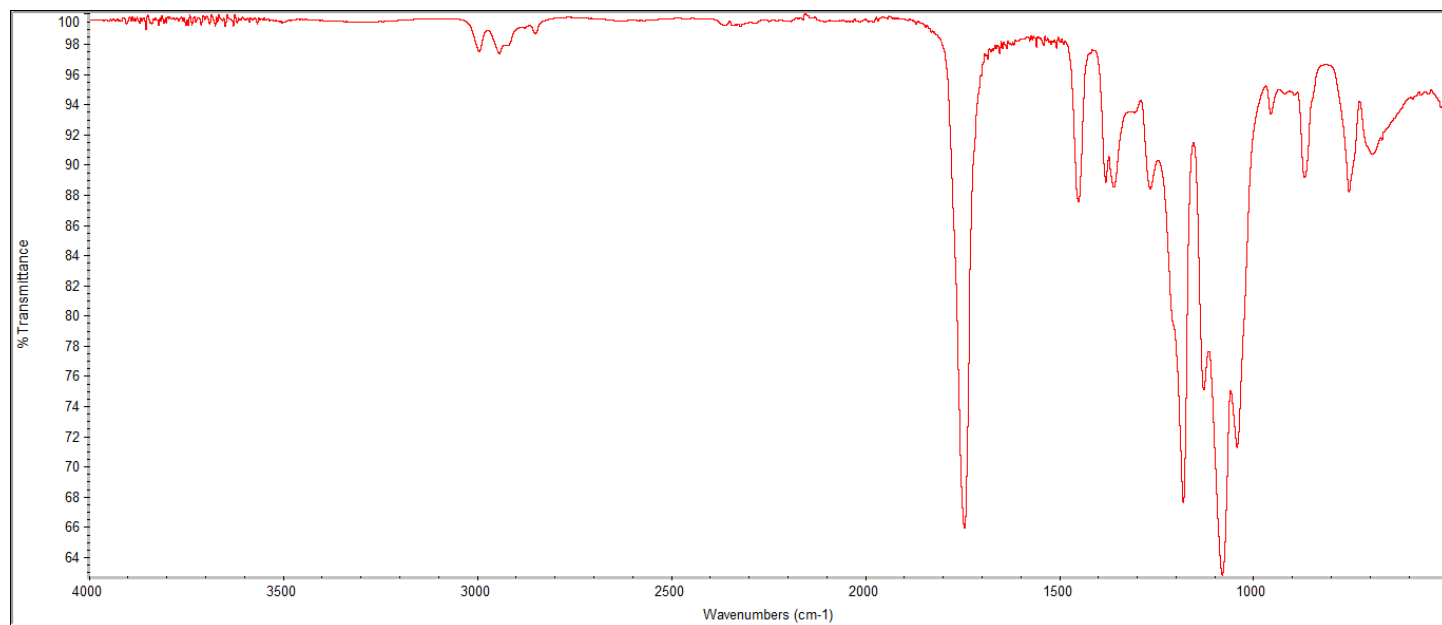
Product Name: Poly(L-Lactide, D,L-Lactide) L:DL 70:30 I.V. 2.30 – 3.30 dl/g, ester endcap (PLDL 7028) (Lot # 250427CPB-771)

H-NMR



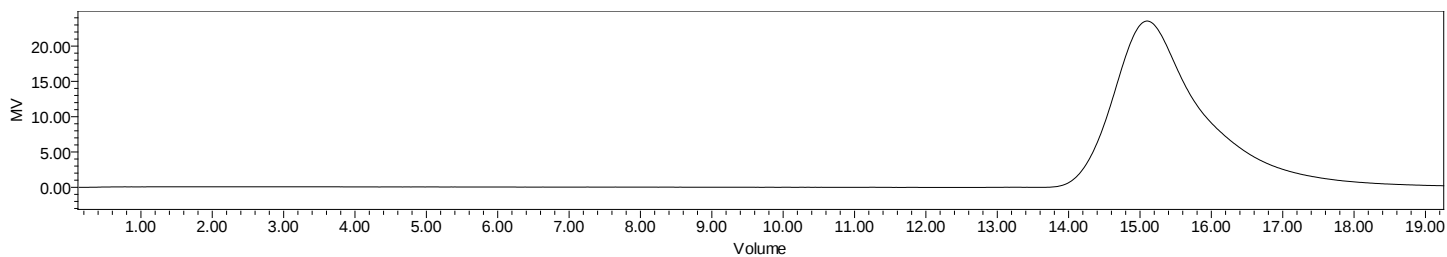
H-NMR Spectrum of copolymers in CDCl3 (NMReady-60e, Nanalysis 60 MHz) NMR of PLDL copolymer.

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	227,692	341,864	1.50

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.

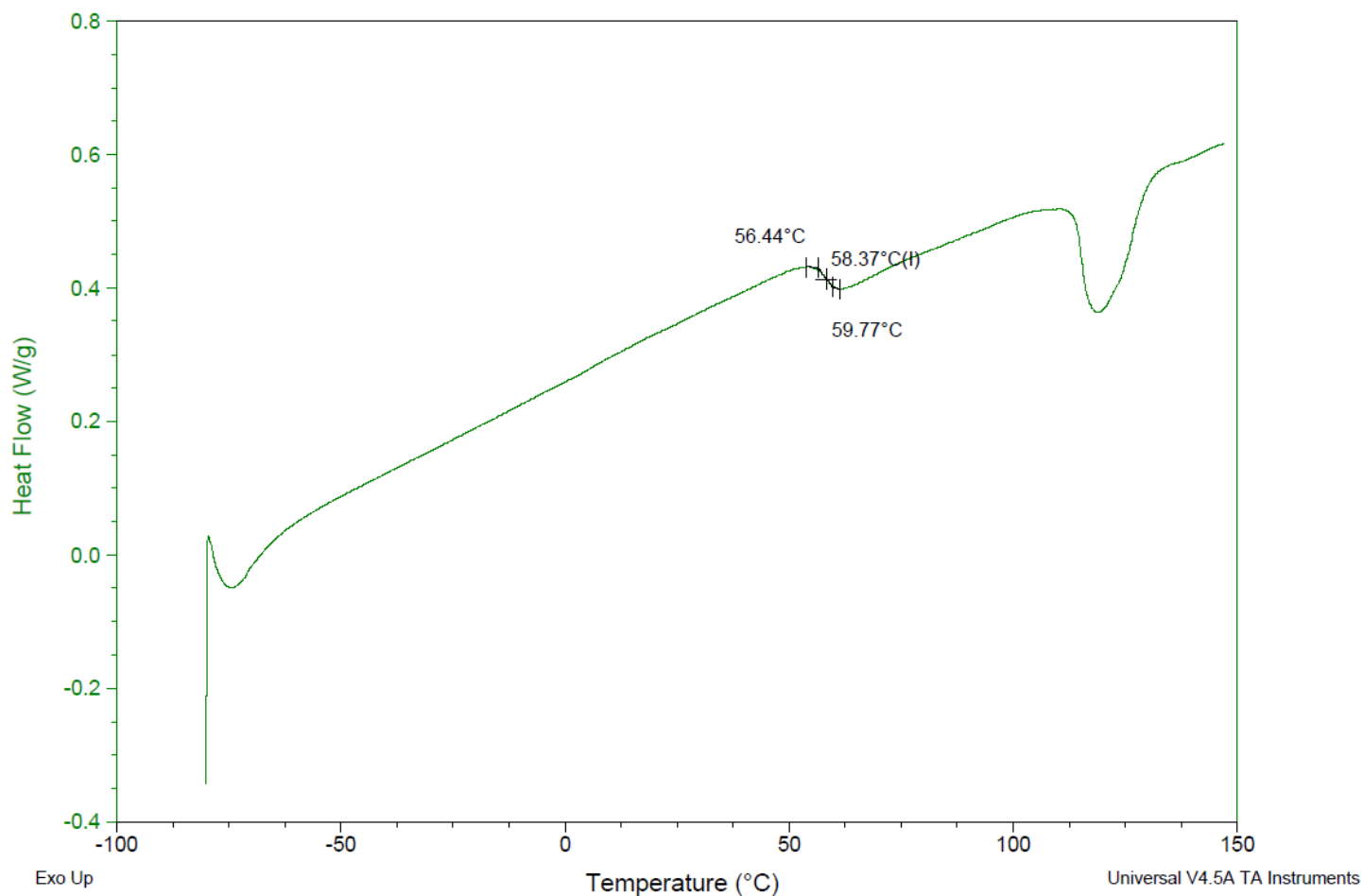
DSC

Sample: CB025 240427CBP-771
Size: 2.5000 mg
Method: Ramp

DSC

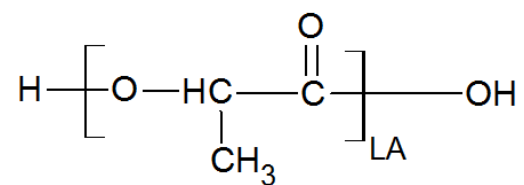
File: C:\...\COA\CB025 240427CBP-771.001

Run Date: 07-Nov-2025 11:52
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 = 58.37 °C

Structure of copolymers



Manufacturer Provided Data

Assay	Specification	Result
Melting onset, DSC, 10 °C/min	100.0 °C	115.1 °C
Melting peak, DSC, 10 °C/min	130.0 °C	120.8 °C
Tin content	<50ppm	29 ppm
Water content ¹	<0.50%	0.05%
Residual monomer, Total	<0.14%	0.10%
Inherent Viscosity ²	2.00-2.80 dL/g	2.53 dL/g
Residual solvent, Total	<0.10%	0.00 %
Residual solvent, Toluene	<890 ppm	<0 ppm
Residual solvent, Acetone	<5000 ppm	6 ppm

1 – Measured by titration

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

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