

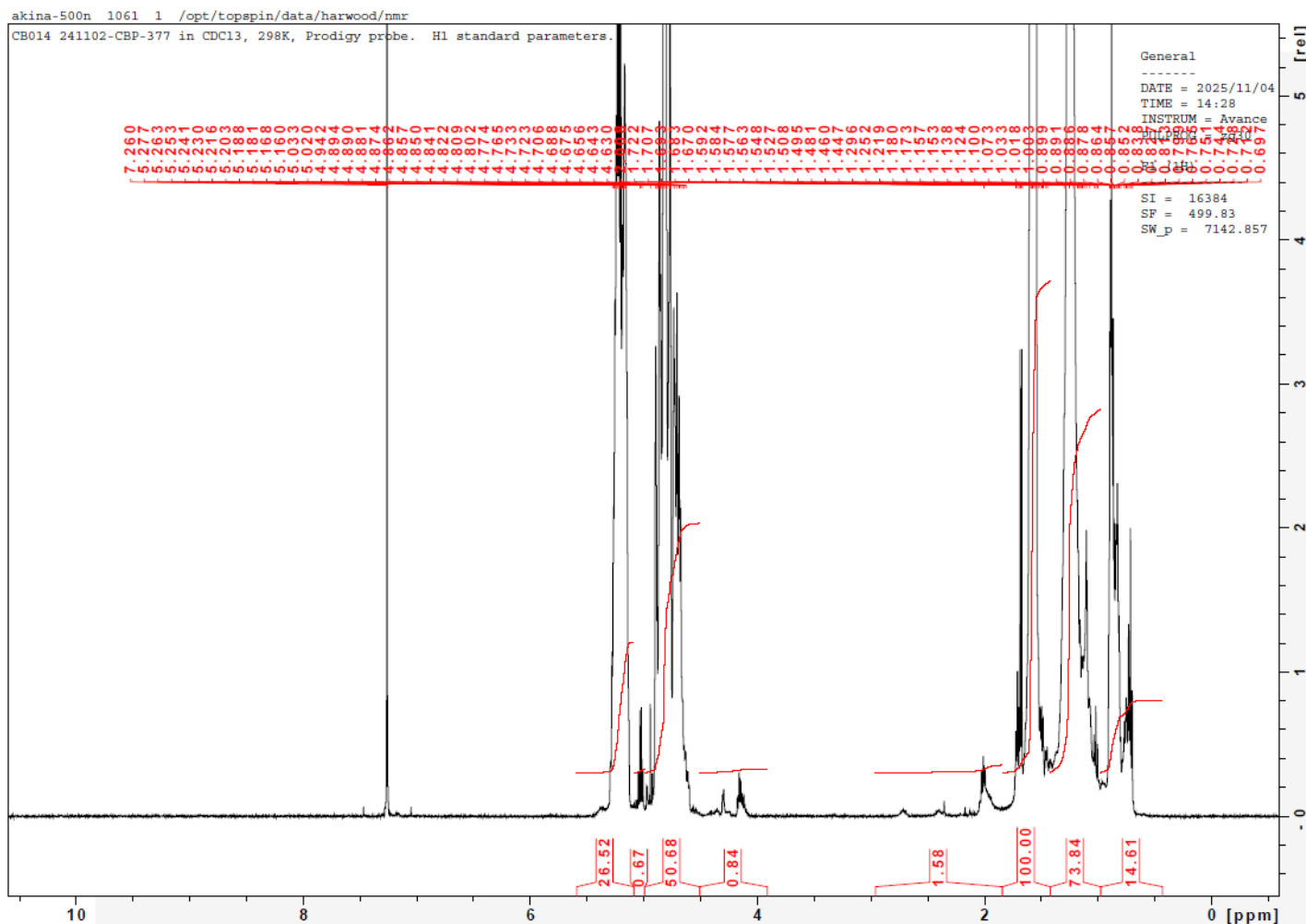
No. CB014

Certificate of Analysis



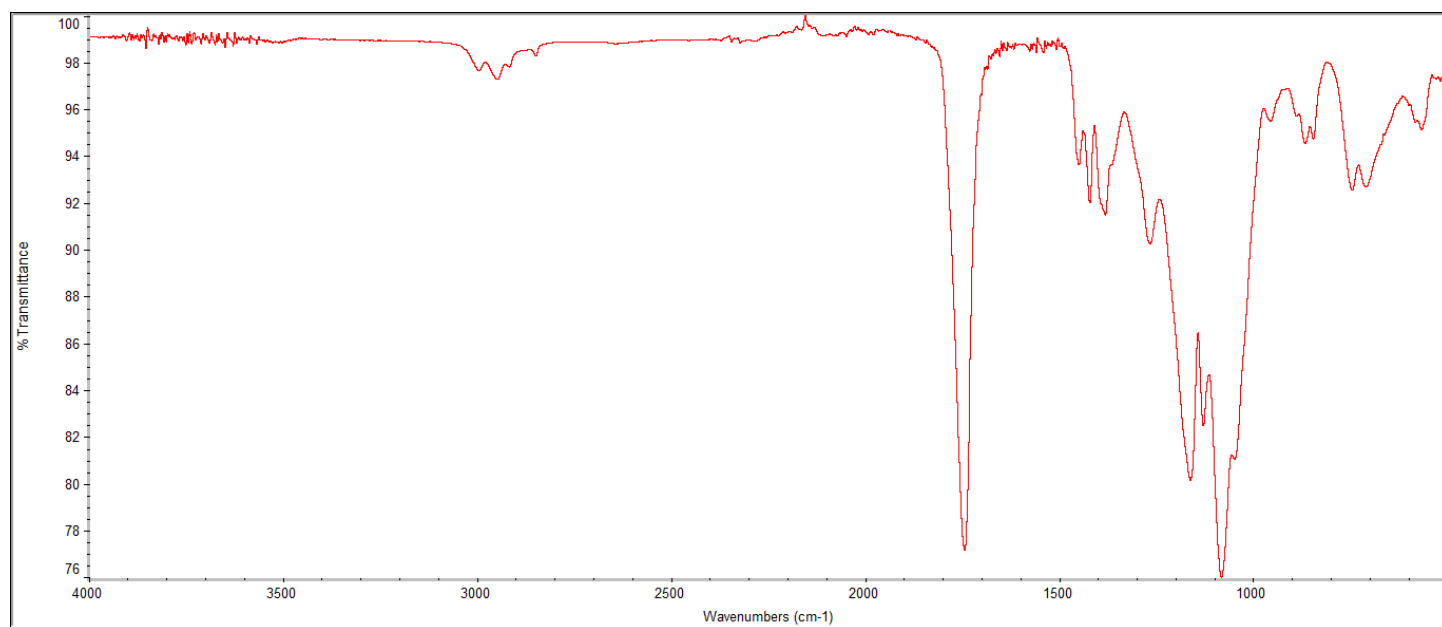
Product Name: Poly(D,L-Lactide-co-glycolide) I.V. 0.32 - 0.48 dl/g, LG 50:50, ester endcap
(PDLG 5004) (Lot # 241102CPB-377)

H-NMR



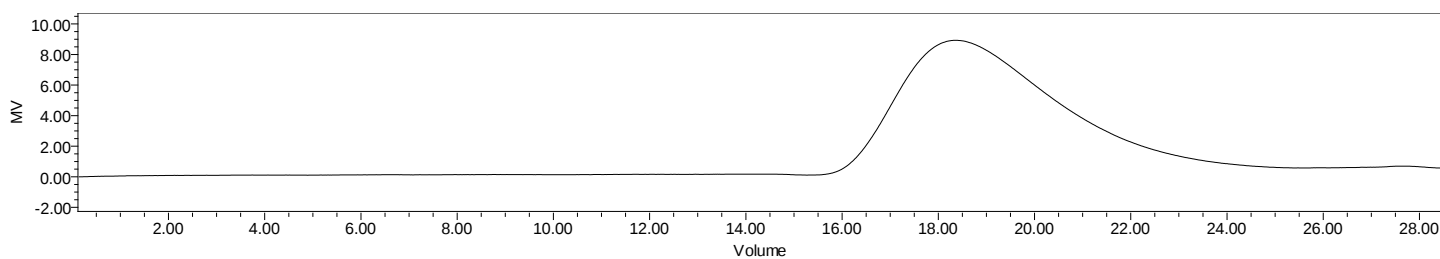
H-NMR Spectrum of copolymers in CDCl₃ (NMReady-60e, Nanalysis 60 MHz) NMR of PLGA copolymer: LA-GA =51%-49% molar ratio (LA:GA 56%:44% w:w)

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
PLGA	32,938	44,046	1.34

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.

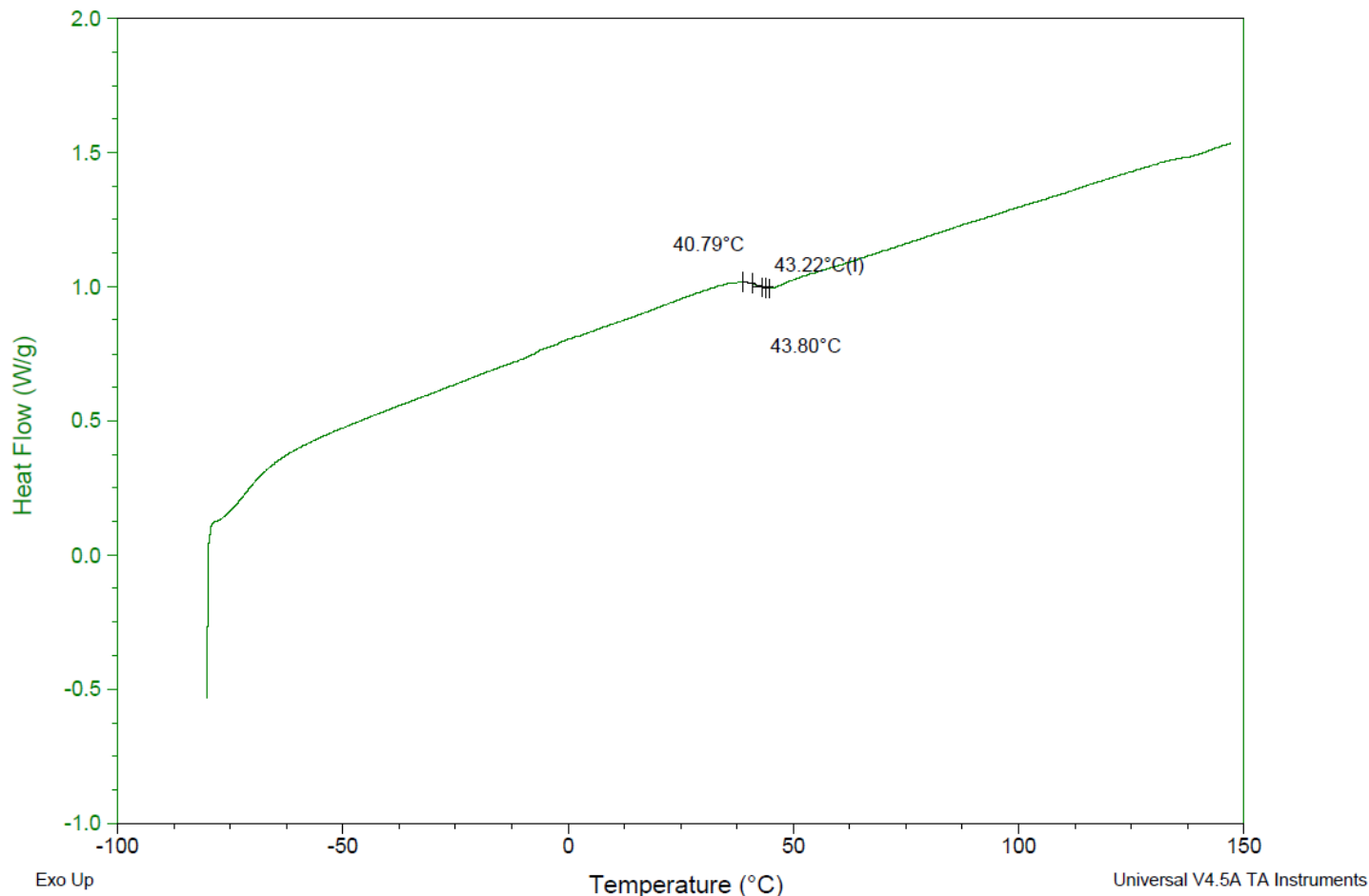
DSC

Sample: CB014 241102CBP-377
Size: 2.0000 mg
Method: Ramp

DSC

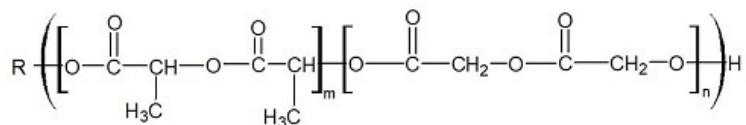
File: C:\...\COA\CB014 241102CBP-377.001

Run Date: 05-Nov-2025 15:19
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. T_g = 43.22 °C

Structure of copolymers



Endcap "R" = [-H] for acid, [-(CH₂)₉CH₃] for ester

Manufacturer Provided Data

Assay	Specification	Result
Total Acid Number ¹	<1.0 mg KOH/g	0.7 mg/g
Tin content	<50ppm	8 ppm
Water content ¹	<0.50%	0.03%
Residual monomer, DL Lactide	<2%	0.8%
Residual monomer, Glycolide	<2%	0.1%
Inherent Viscosity ²	0.32-0.48 dL/g	0.40 dL/g
Endotoxin	<6 EU/g	X EU/g
Residual solvent, total	<0.10%	0.02 %
Residual solvent, Toluene	<890 ppm	155 ppm

1 – Measured by titration

2 – Measured at 25 °C in Chloroform c=0.5 g/dL

Approved By:
Amie Tyler
 Quality Manager