

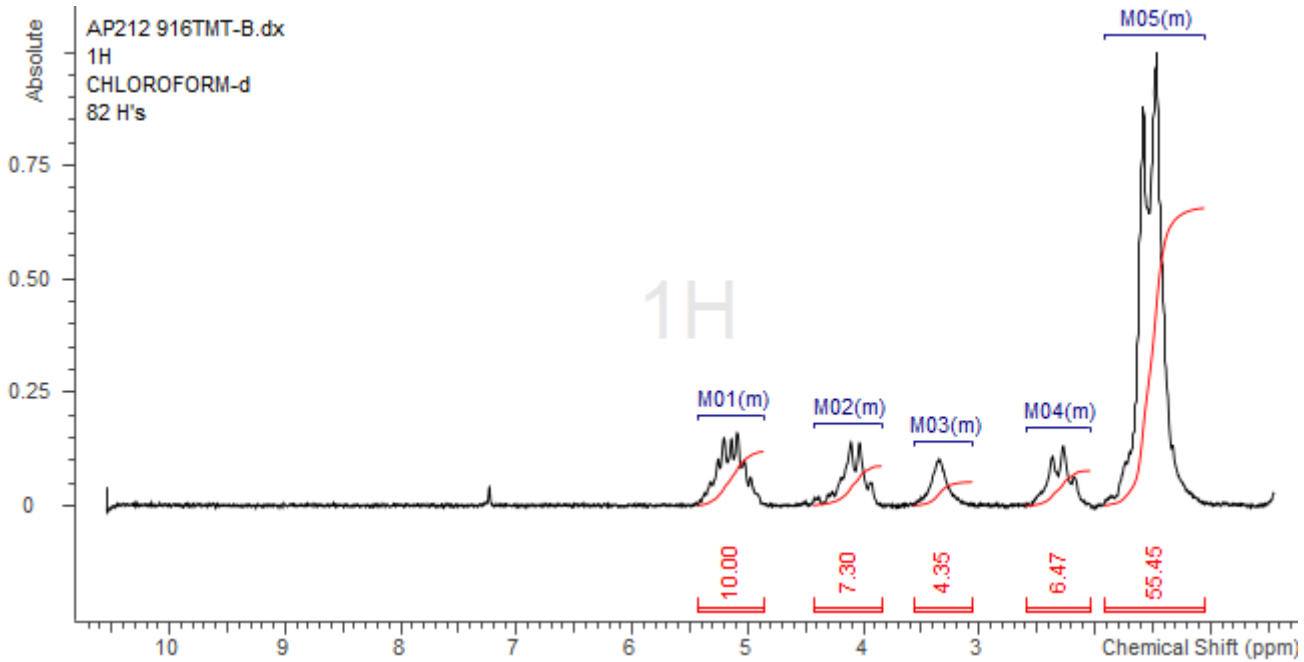
No. AP212

Certificate of Analysis



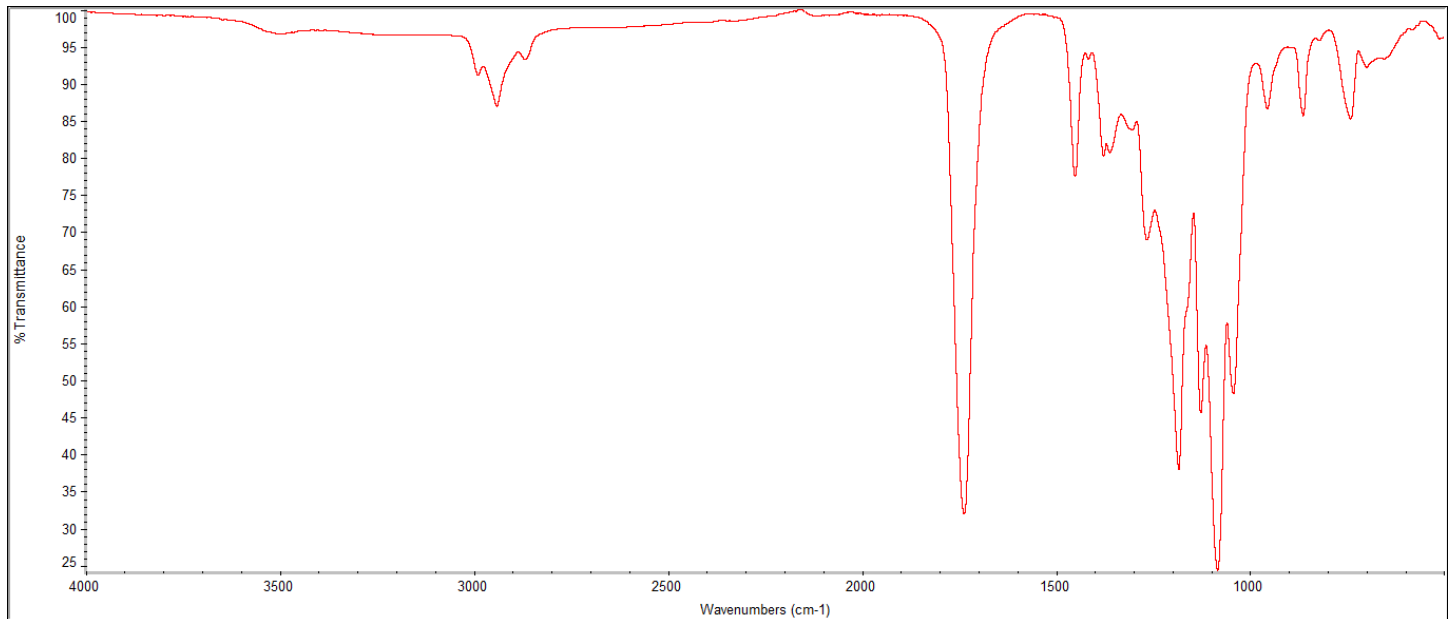
Product Name: Poly(DL-lactide-co-caprolactone) 70:30 LA:CL acid endcap
(M_n 1,000-5,000 Da) (Lot# 240916TMT-B)

H-NMR



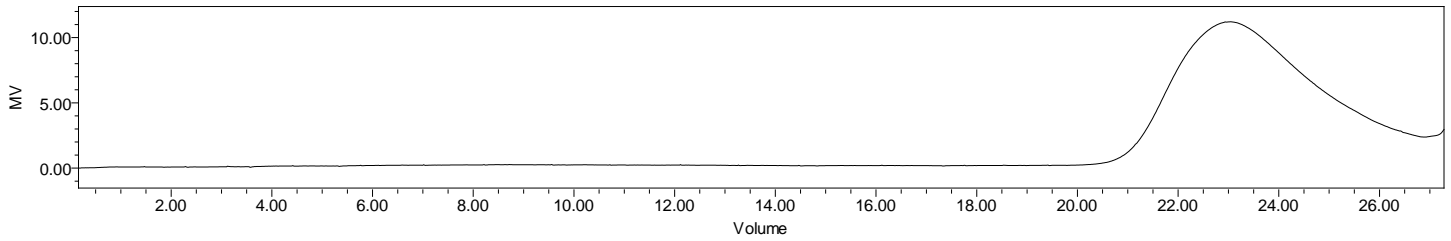
H-NMR Spectrum of copolymers in $CDCl_3$ (NMReady-60e, Nanalysis 60 MHz) NMR of PLGA copolymer: LA-CL =73%-27% molar ratio (LA:CL 63%:37 w:w)

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
P(DL)LCL	1989	3158	1.59

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

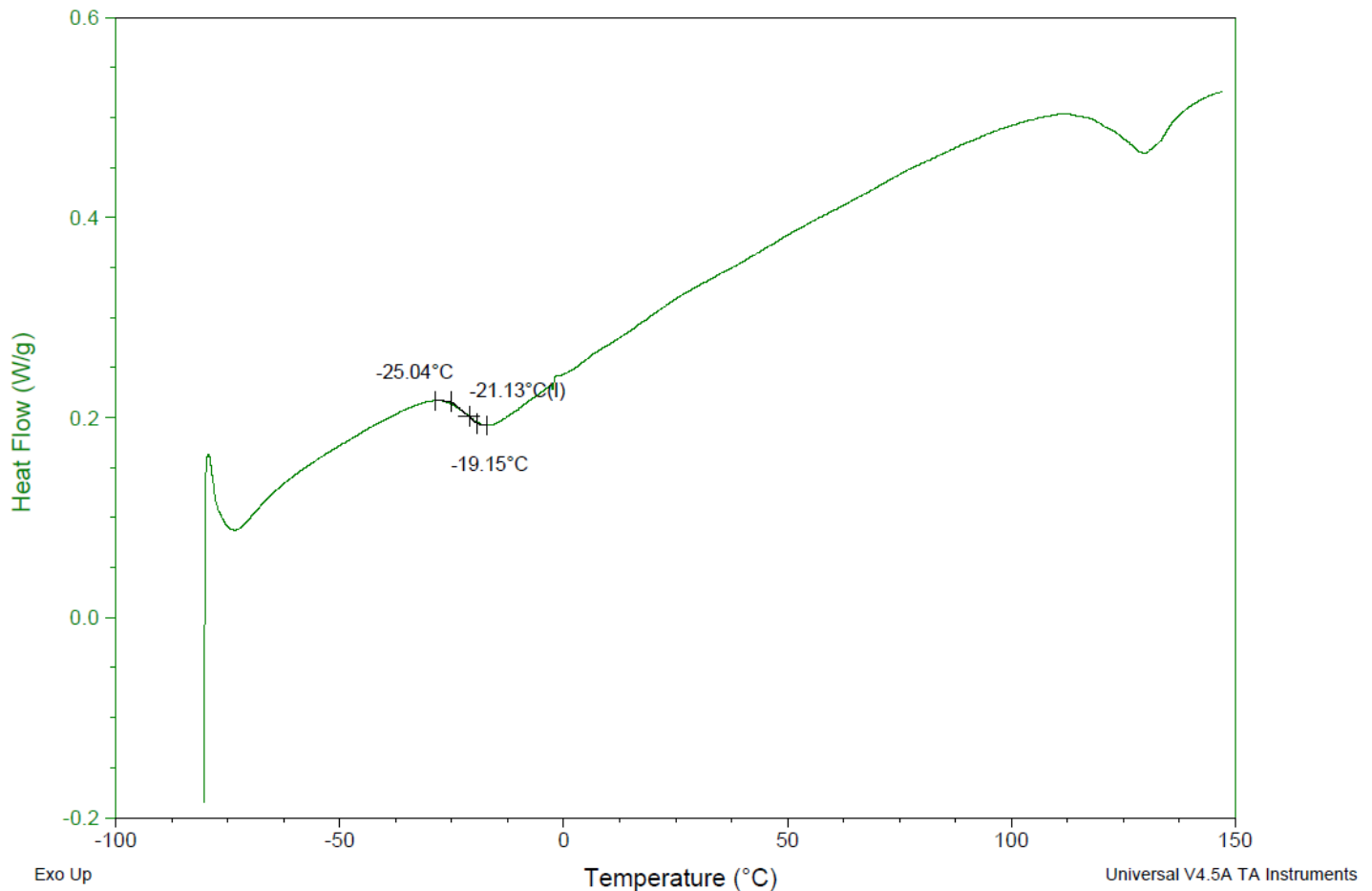
Sample: AP212 24916TMT-B
Size: 4.3000 mg
Method: Ramp

DSC

File: \\...COA\AP212 240916TMT-B DSC.001

Run Date: 19-Sep-2024 13:59

Instrument: DSC Q2000 V24.11 Build 124

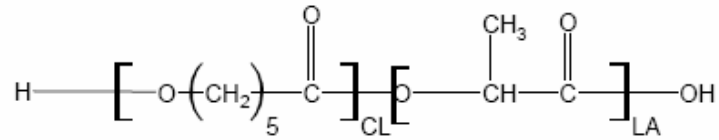


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. T_g = 21.13 °C

IV

Inherent Viscosity: 0.090 dL/g (calculated from kinematic viscosity at 2% w/v Acetone on Rheosense microVISC, n=3) at 25°C.

Structure of P(DL)LCL copolymers



Approved By:
Amie Tyler
Quality Manager