

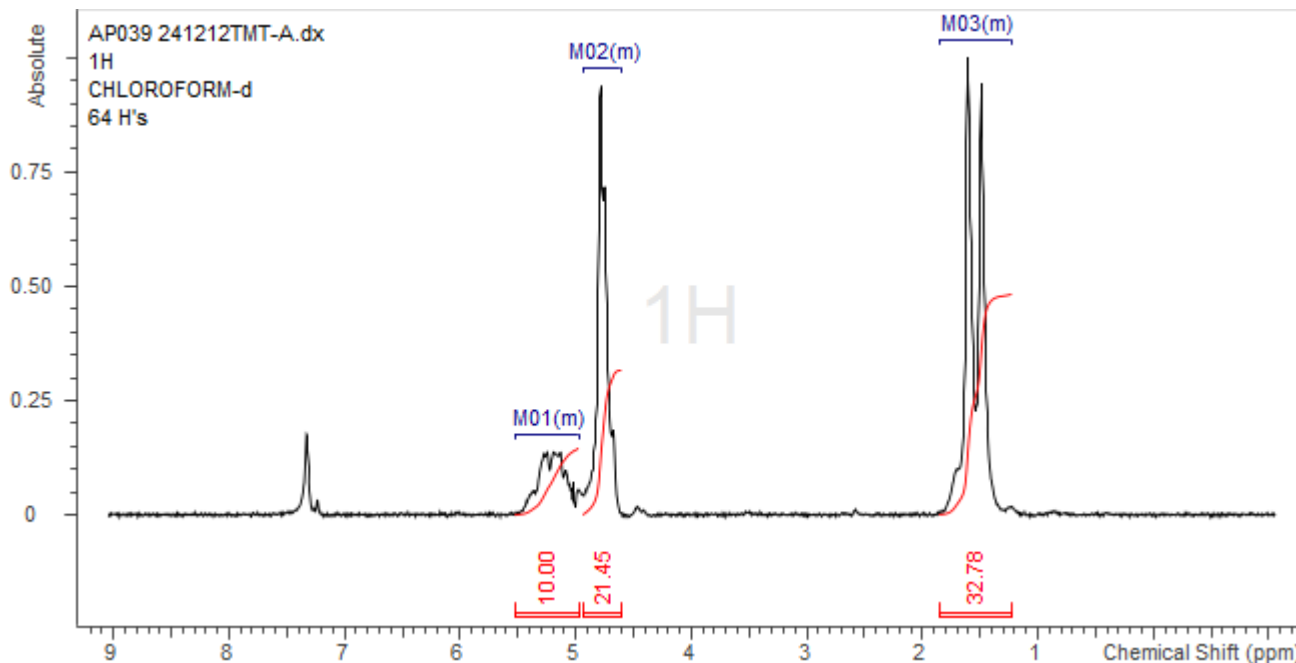
No. AP039

Certificate of Analysis



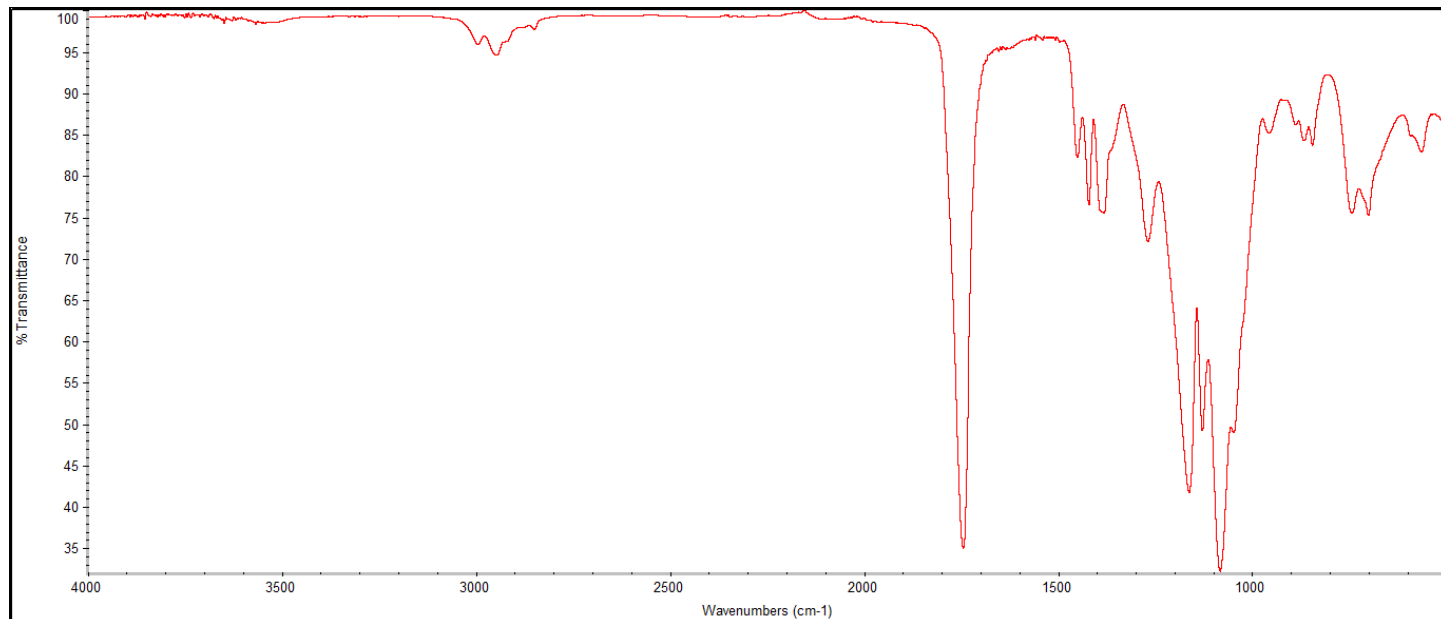
Product Name: Poly(lactic-co-glycolic acid) ester endcapped (50:50 LA:GA,
Mn: 35,000-45,000 Da) (Lot#: 241212TMT-A)

H-NMR



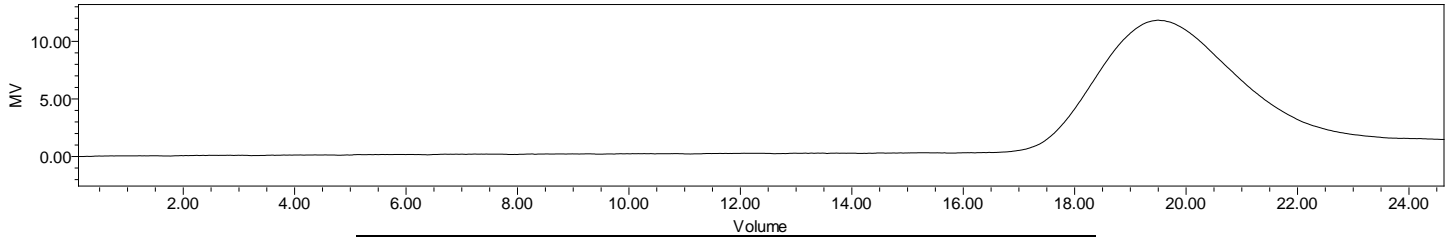
H-NMR Spectrum of copolymers in CDCl₃ (NMReady-60e, Nanalysis 60 MHz) NMR of PLGA copolymer: LA-GA =48%:52% molar ratio (LA:GA 54%:46% w:w)

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	35,197	44,641	1.27

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

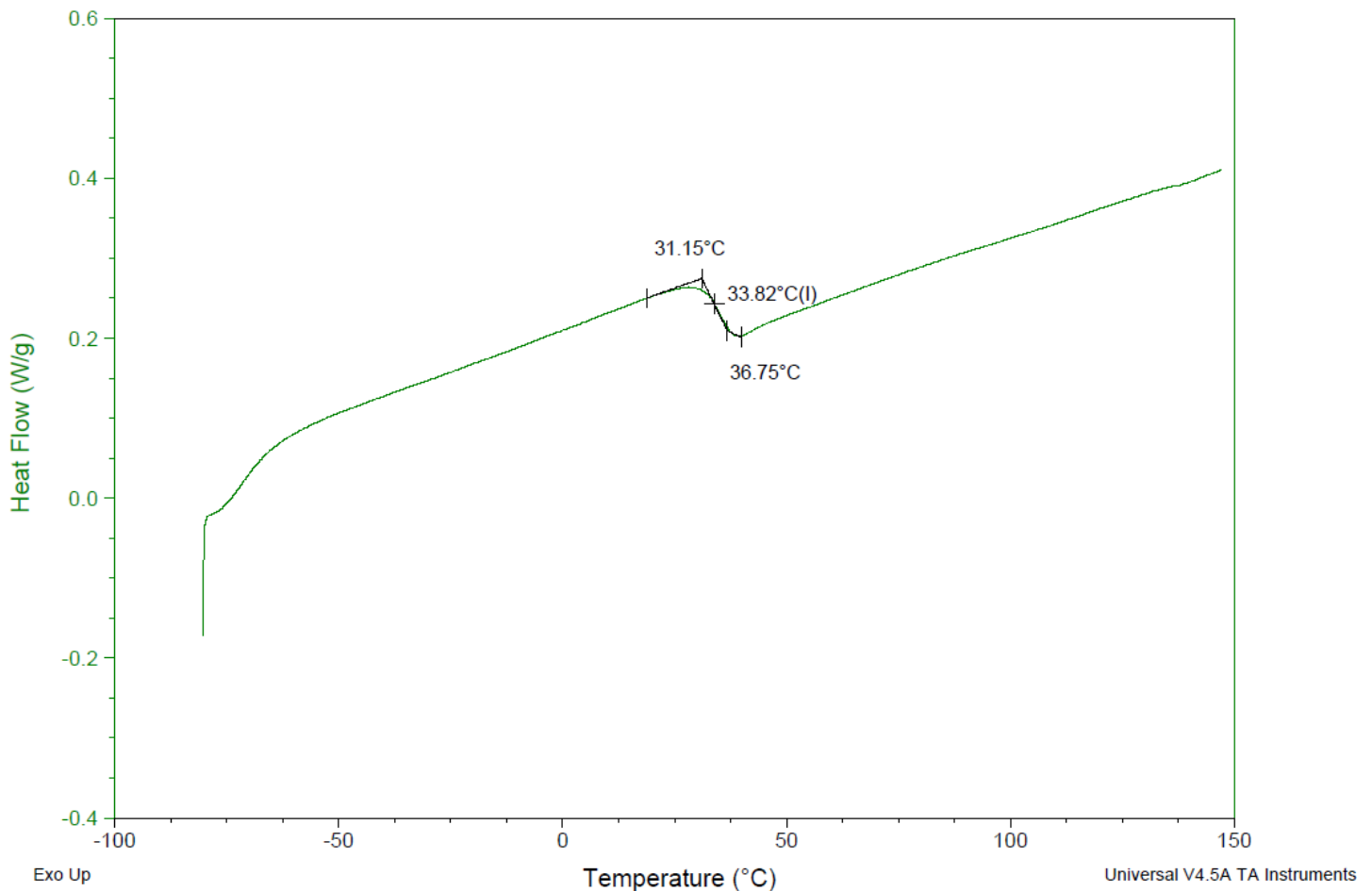
Sample: AP039 241212TMT-A DSC
Size: 4.8000 mg
Method: Glass Transition-simple

DSC

File: \\...COA\AP039 241212TMT-A DSC.001

Run Date: 18-Dec-2024 09:18

Instrument: DSC Q2000 V24.11 Build 124

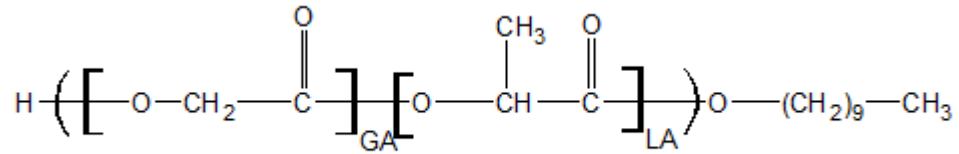


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. T_g = 33.82 °C

IV

Inherent Viscosity: $0.194 \pm .021$ dL/g (calculated from kinematic viscosity at 2% w/v Acetone on Rheosense microVISC, n=3) at 25°C.

Structure of copolymers



Approved By:
Amie Tyler
Quality Manager