

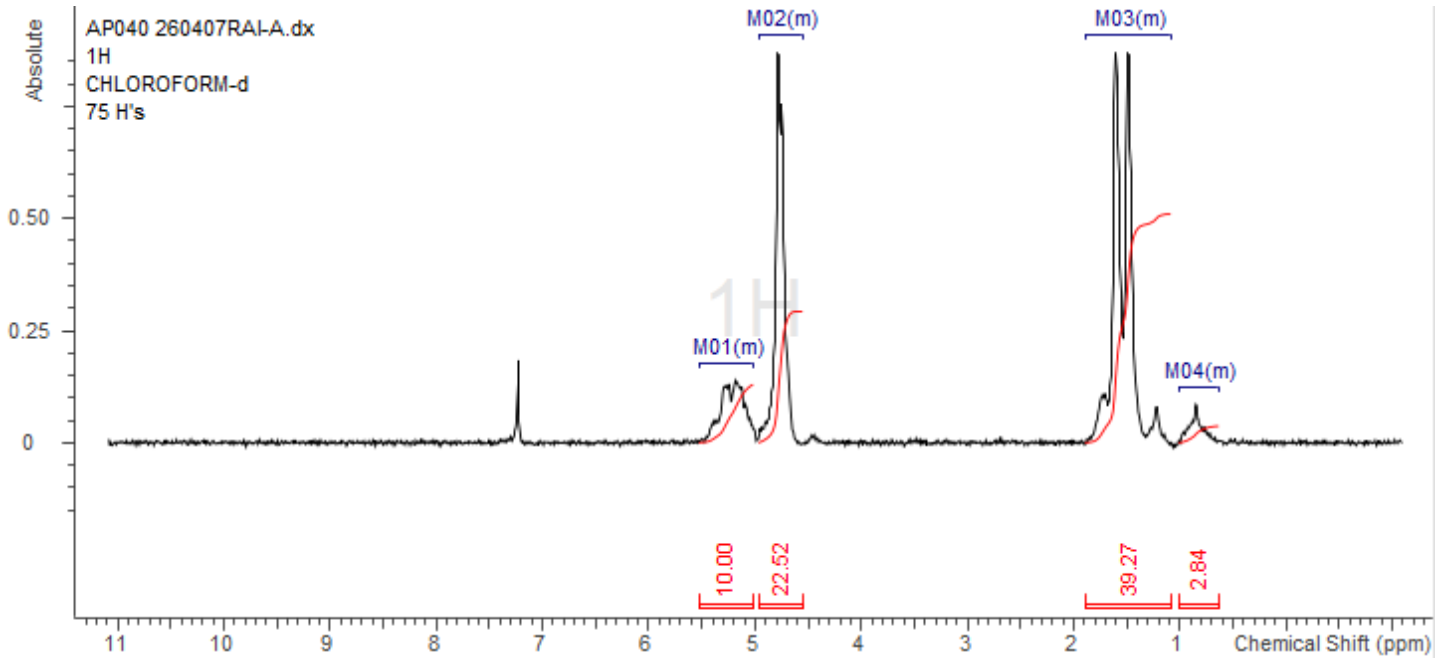
No. AP040

# Certificate of Analysis



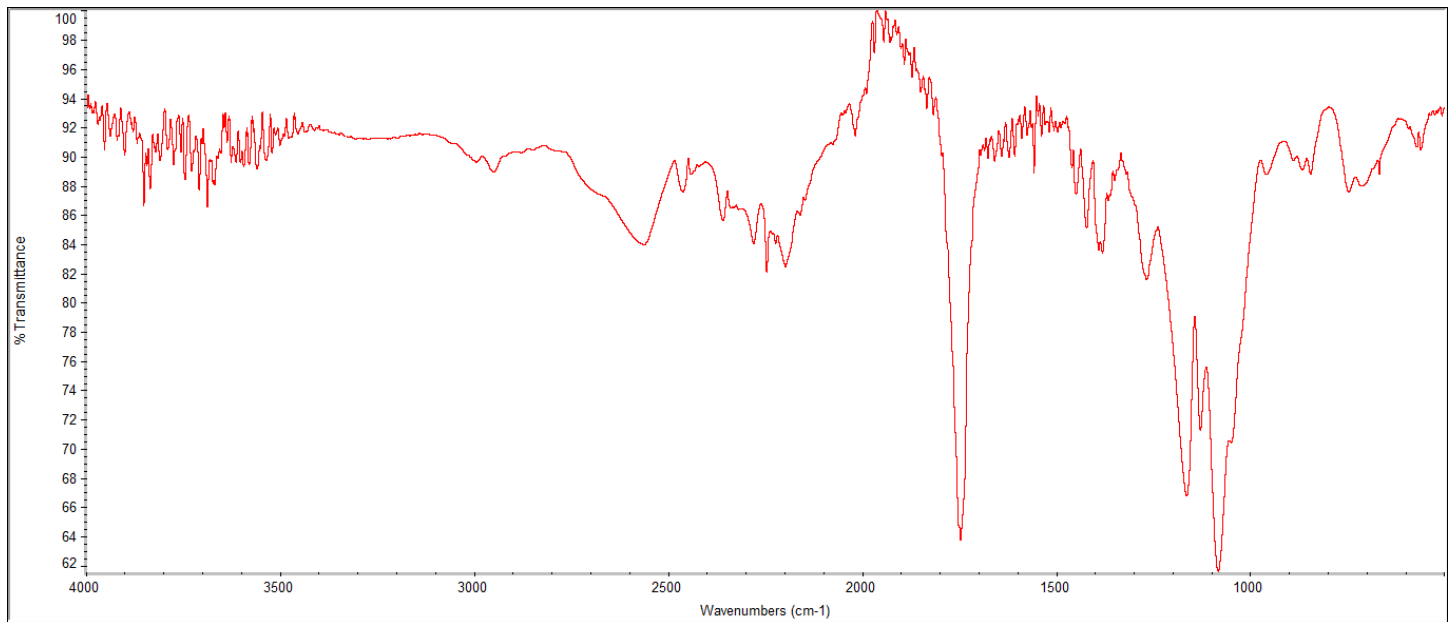
Product Name: Poly(lactide-co-glycolide) acid endcap (50:50 LA:GA)  
(Mn: 15,000-25,000 Da) (Lot#: 260407RAI-A)

## H-NMR



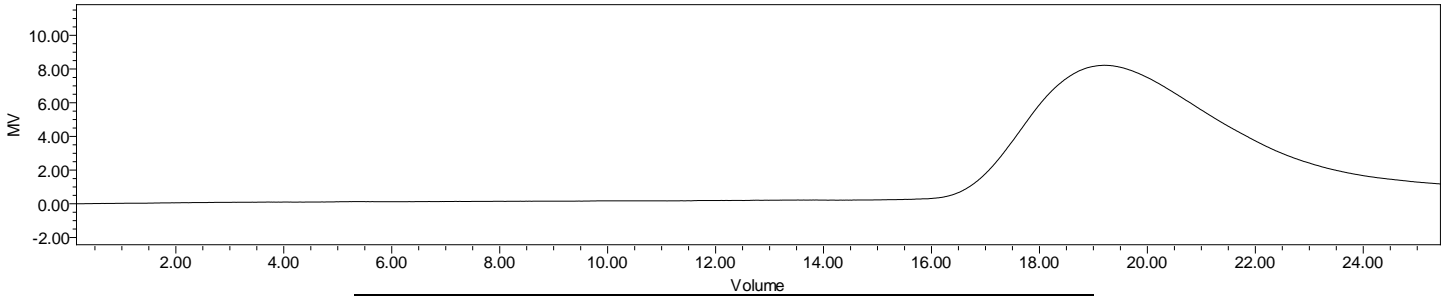
H-NMR Spectrum of copolymers in CDCl<sub>3</sub> (NMReady-60e, Nanalysis 60 MHz) NMR of PLGA copolymer: LA-GA =47%-53% molar ratio (LA:GA 52%:48% w:w)

## FTIR



FTIR Analysis: Collected from IS5 ID7-ATR spectrometer (Thermo Scientific) and analyzed in transmission mode.

# GPC-ES



Polymer	M <sub>n</sub> (from GPC)	M <sub>w</sub> (from GPC)	PDI
PLGA	24,487	32,977	1.35

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.

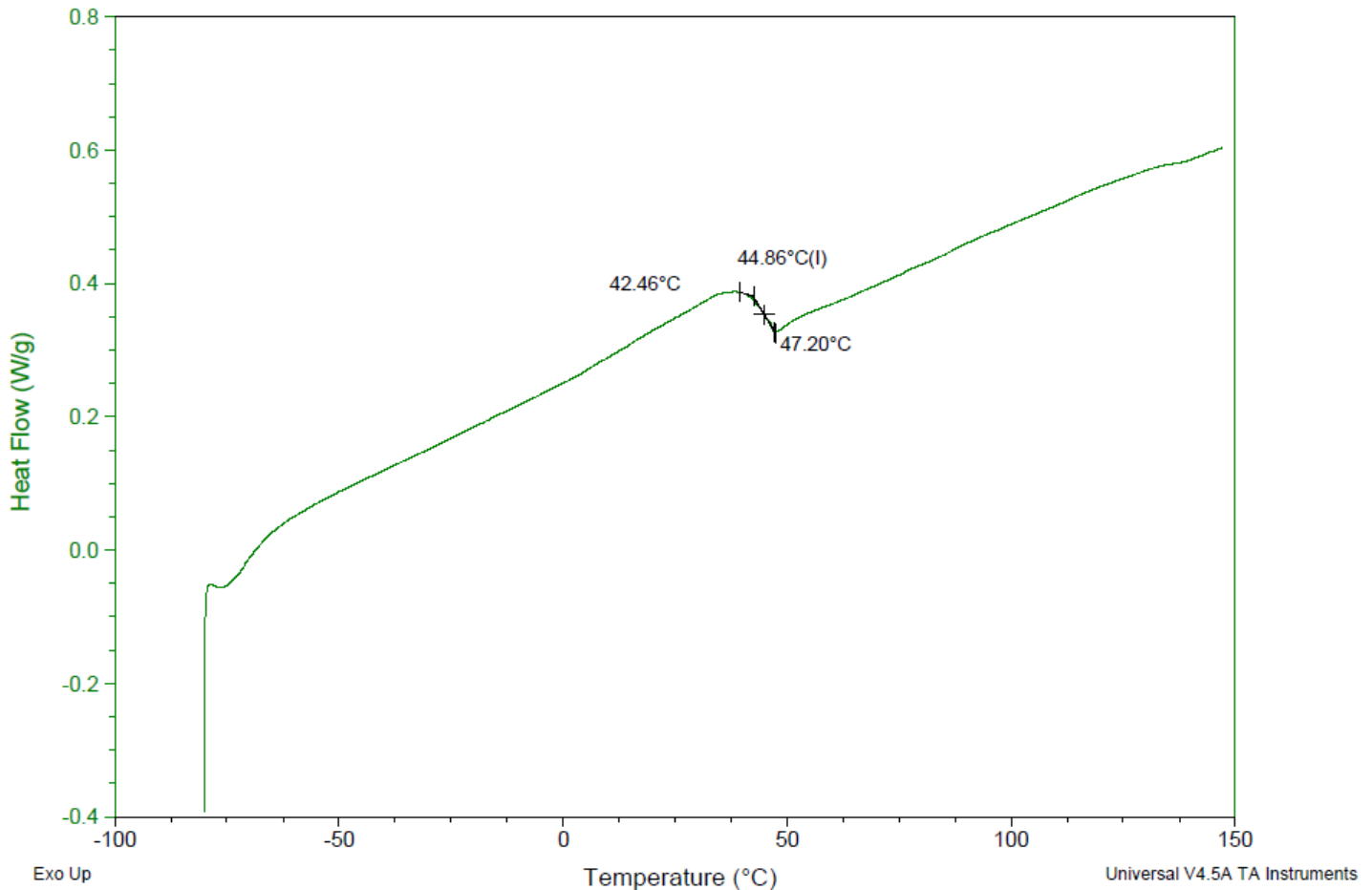
# DSC

Sample: AP040 260407RAI-A  
Size: 2.6000 mg  
Method: Ramp

## DSC

File: C:\...\COA\AP040 260407RAI-A.001

Run Date: 14-Apr-2026 14:33  
Instrument: DSC Q2000 V24.11 Build 124

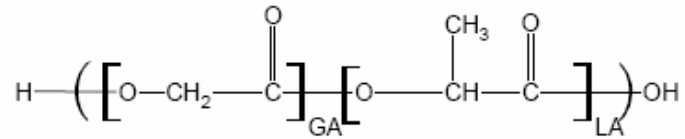


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. T<sub>g</sub> = 44.86 °C

## IV

**Inherent Viscosity:**  $0.271 \pm 0.014$  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