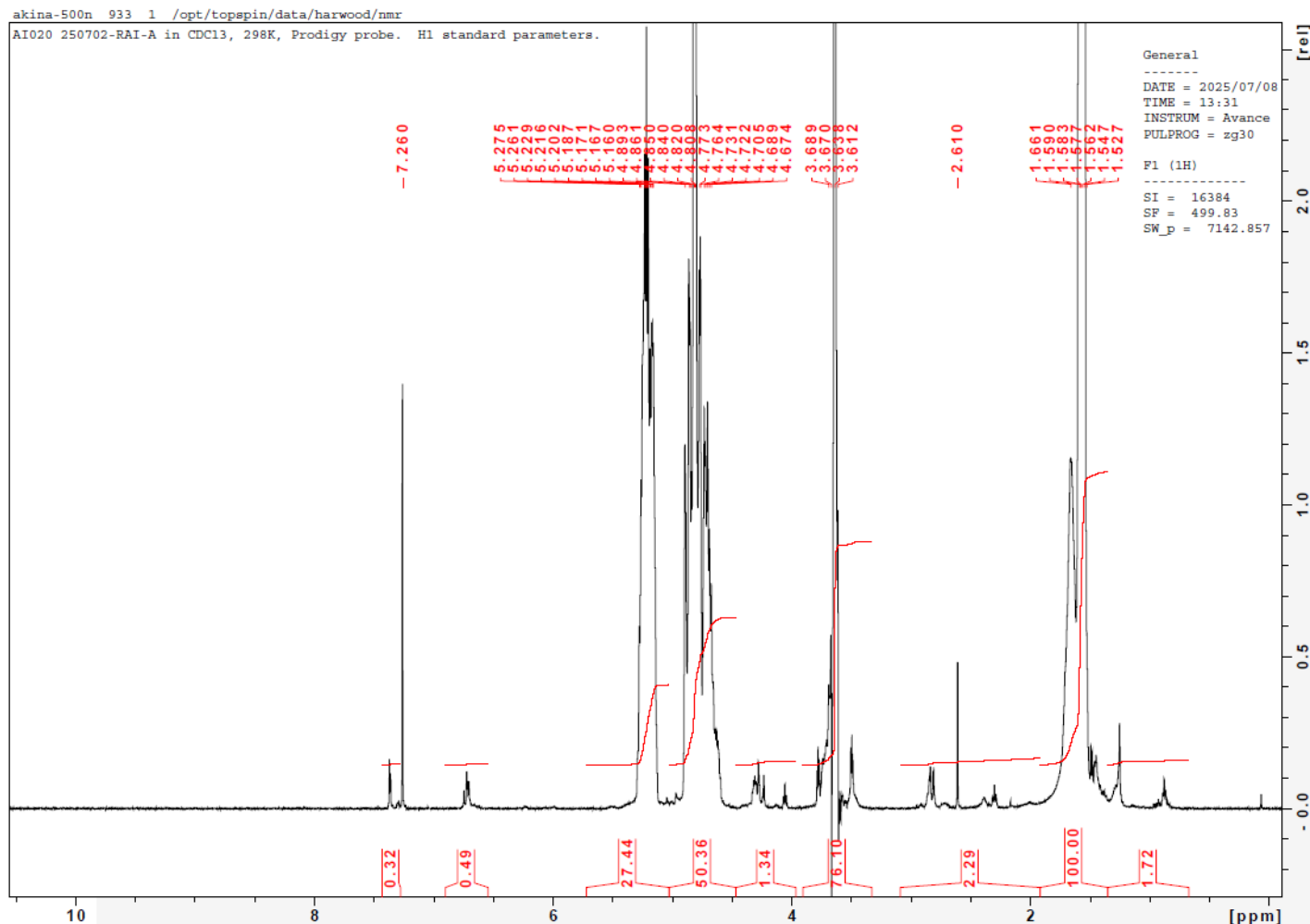


No. AI020 Certificate of Analysis

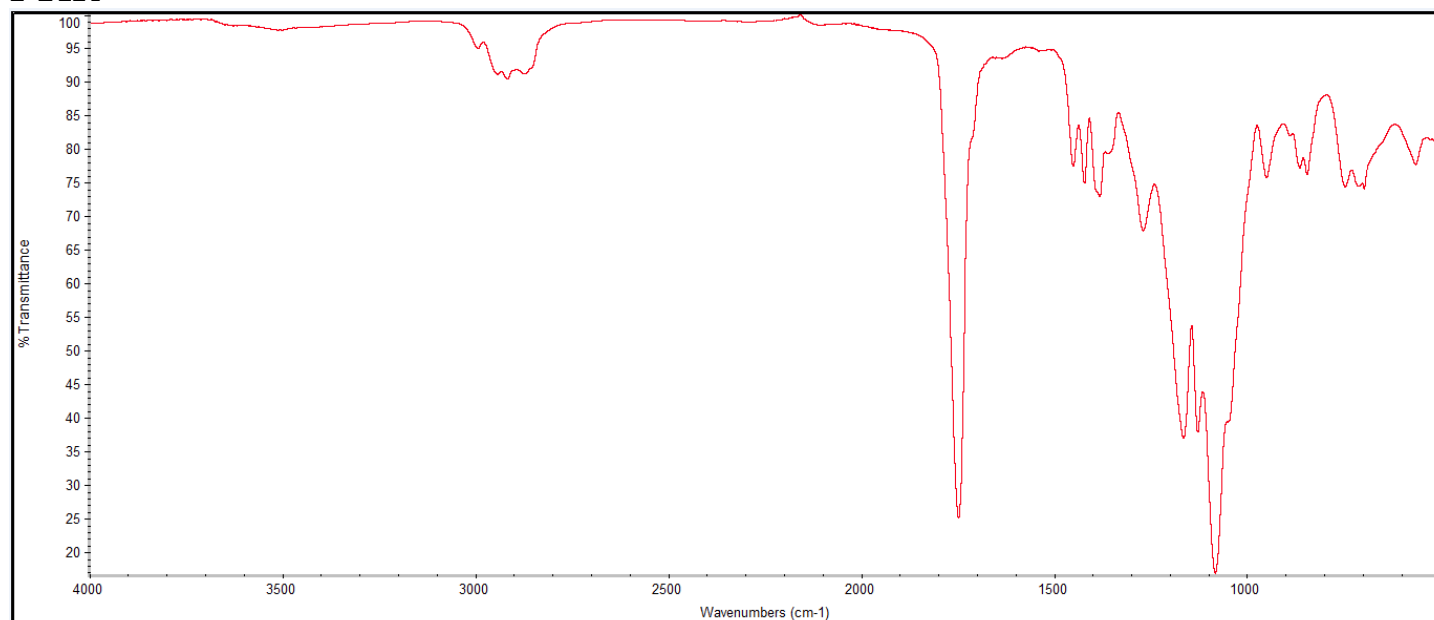
Product Name: Poly(lactic-co-glycolic)-b-Poly(ethylene glycol)-Maleimide Copolymers
LA:GA 50:50 ($M_w \sim 20,000$ -5,000Da) (Lot#: 250702RAI-A)

H-NMR



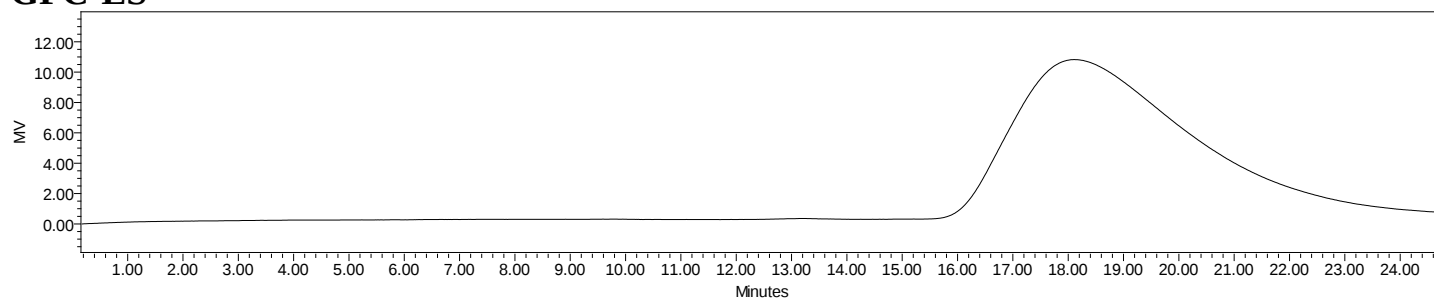
H-NMR Spectrum of copolymers in CDCl₃ (Bruker ≥ 300 MHz, PINMRF) NMR of PLGA-PEG-Mal copolymer: EG*/LA-GA =113*/163-150 (Mn EG*/LA:GA 4978*/11735-8680 Da) LA:GA 57%:43% *from MFG data

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-PEG-Mal	32,394	46,277	1.43
PEG-Precursor	4996*		

*From MFG data

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.*from MFG data

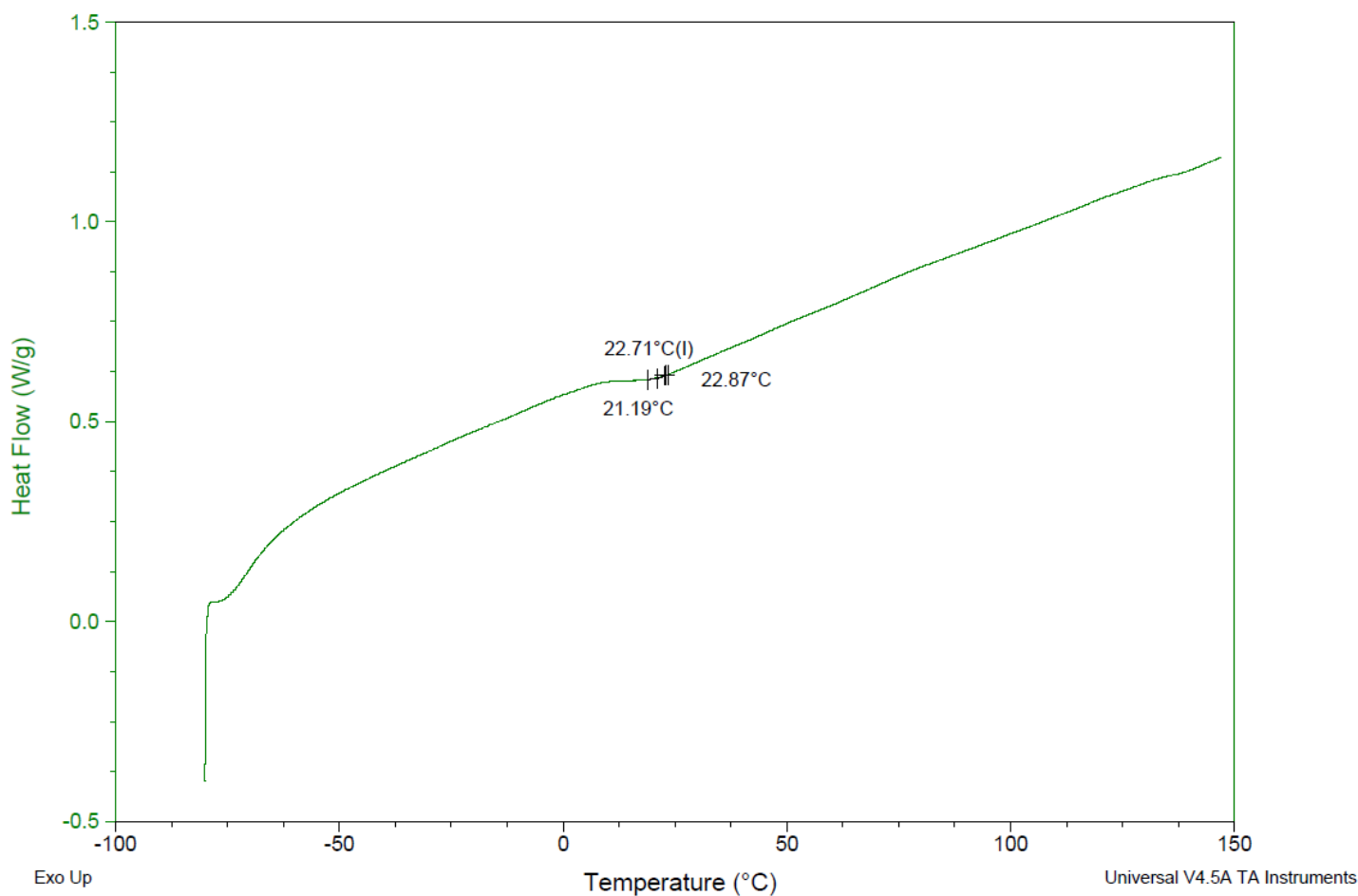
DSC

Sample: AI020 250702RAI-A
Size: 2.8000 mg
Method: Ramp

DSC

File: C:\...\COA\AI020 250702RAI-A.002

Run Date: 09-Jul-2025 15:27
Instrument: DSC Q2000 V24.11 Build 124

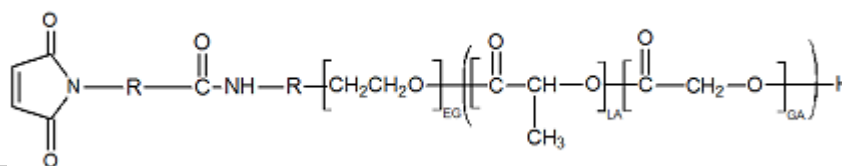


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibration 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 22.71 °C

IV

Inherent Viscosity: 0.200 ± 0.040 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