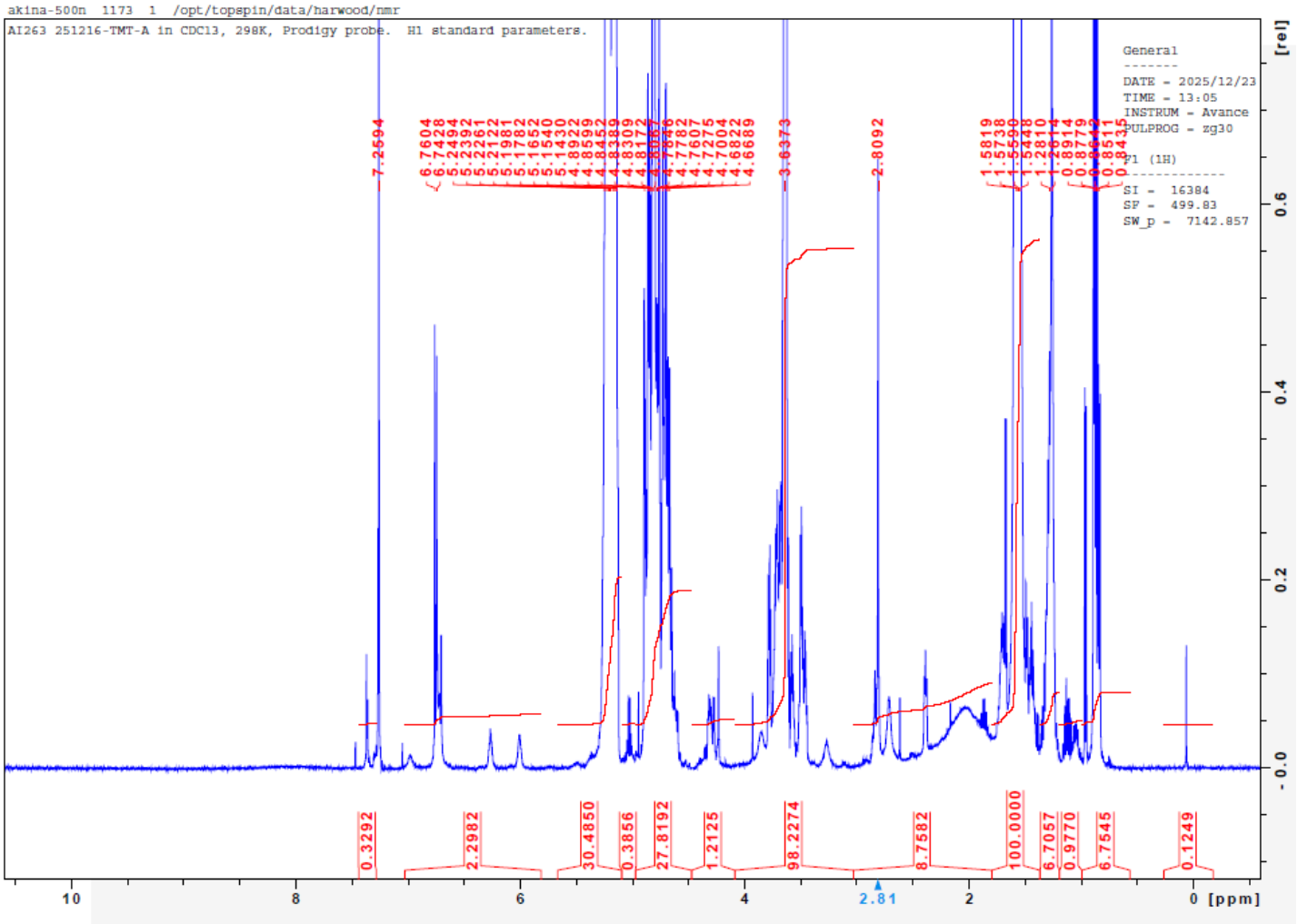
No. AI263 Certificate of Analysis

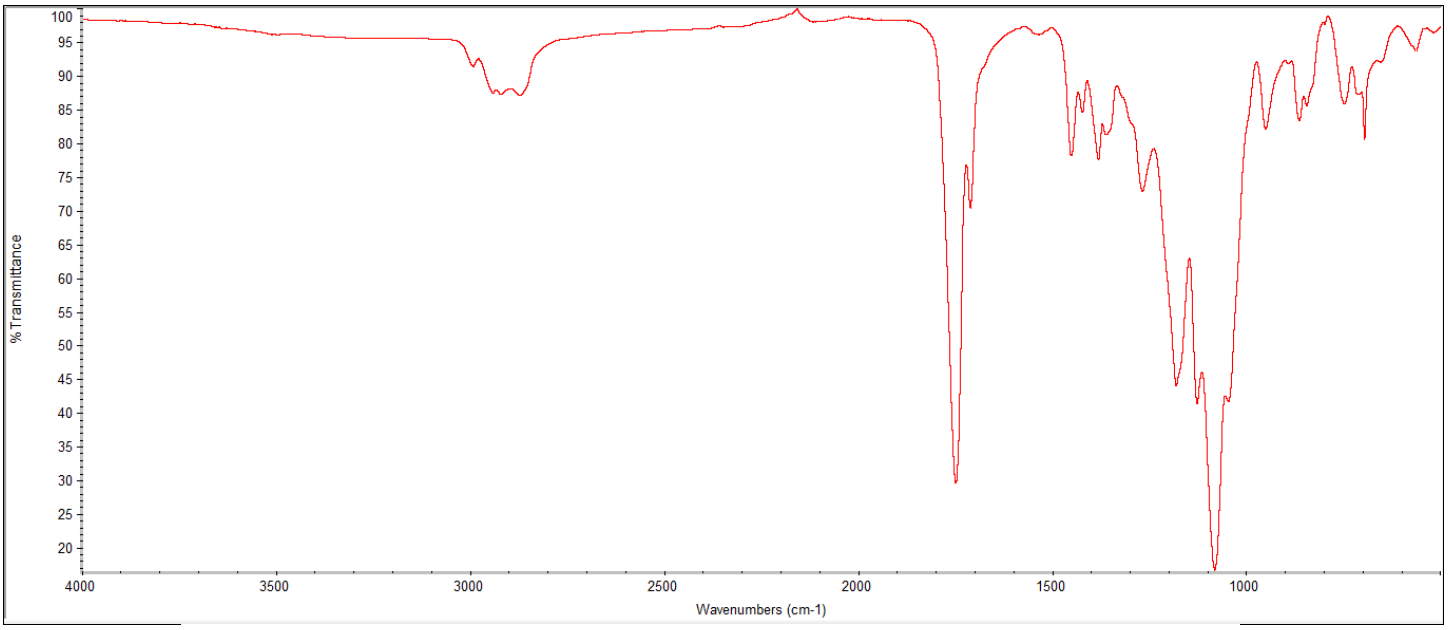
Product Name: Maleimide-Poly(ethylene glycol)-*b*-Poly(lactide-co-glycolide) diblock copolymers (70:30 LA:GA, Mw~5,000-20,000 Da) (Lot#: 251216TMT-A)

H-NMR



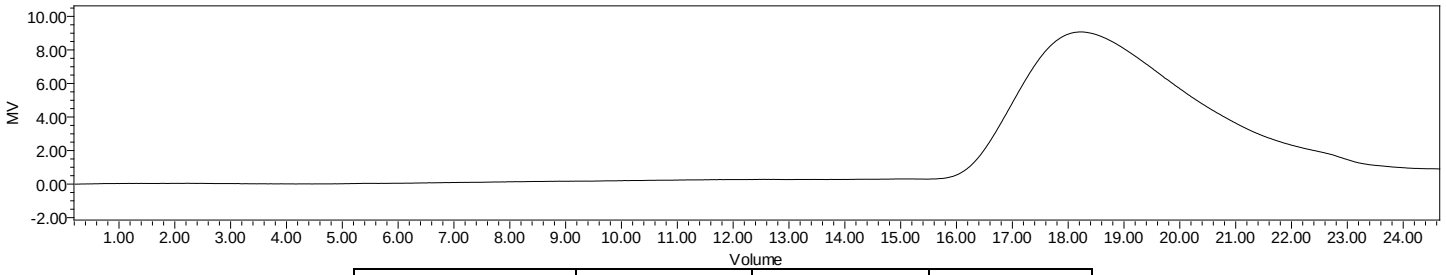
H-NMR Spectrum of copolymers in CDCl3 (Bruker ≥300 MHz, PINMRF) NMR of PLGA copolymer: EG*/LA-GA =103*/128-58 (Mn EG*/LA:GA 4538*/9206-3386 Da) LA:GA 73%:27% *from MFG data

FTIR



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

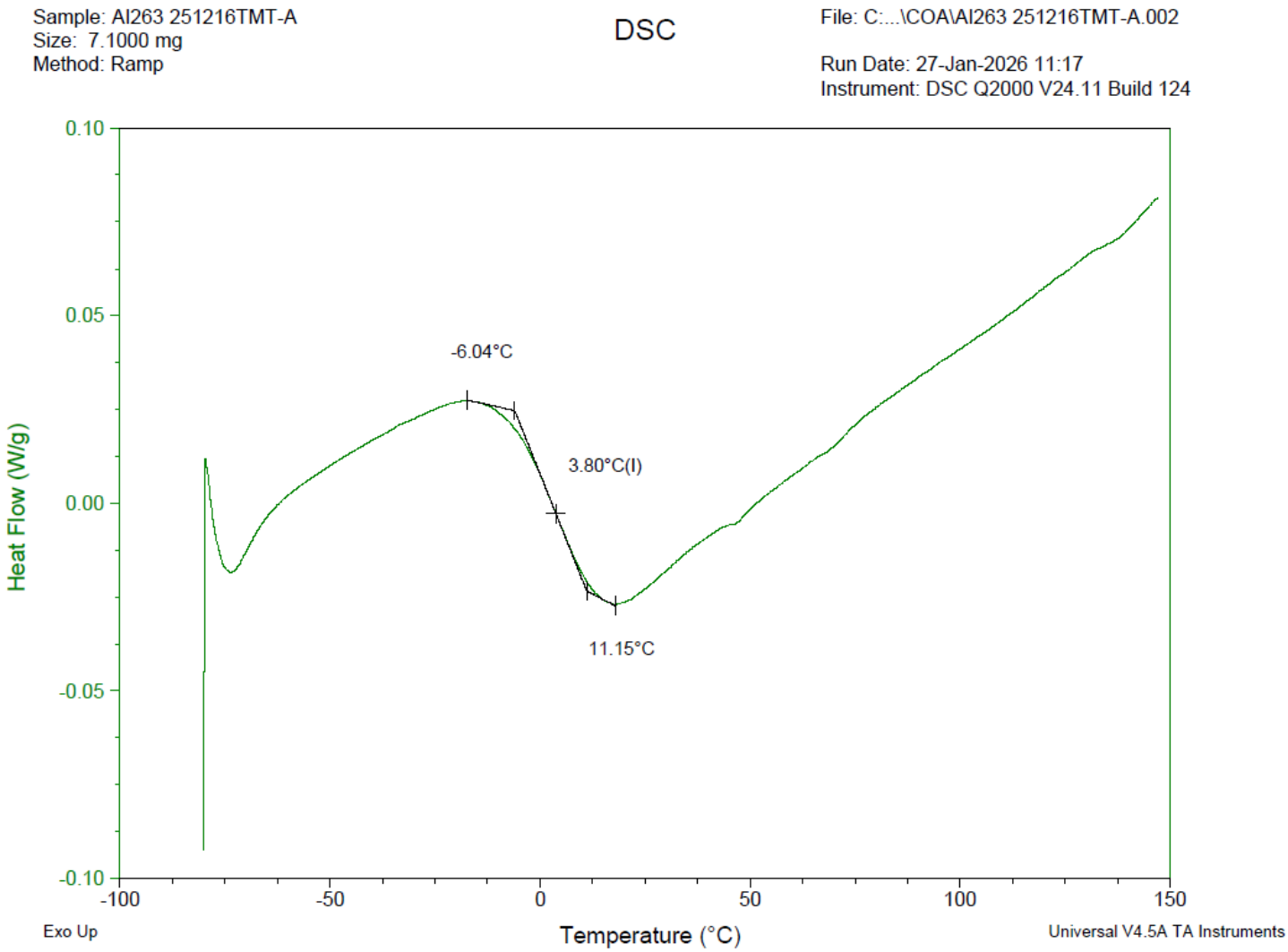
GPC-ES



Polymer	M_n (from GPC)	M_w (from GPC)	PDI
PLGA-PEG-Mal	29,709	42,273	1.43
PEG-precursor*	4500*		

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 (if PEG present)

DSC

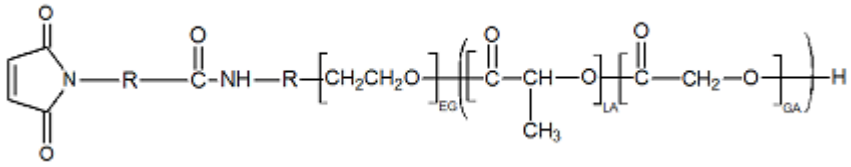


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 3.80 °C

IV

Inherent Viscosity: 0.274 ± 0.006 dL/g (calculated from kinematic viscosity at 2% w/v Acetone on Rheosense microVISC, n=3) at 25ºC.

Structure of copolymers



Approved By:
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