

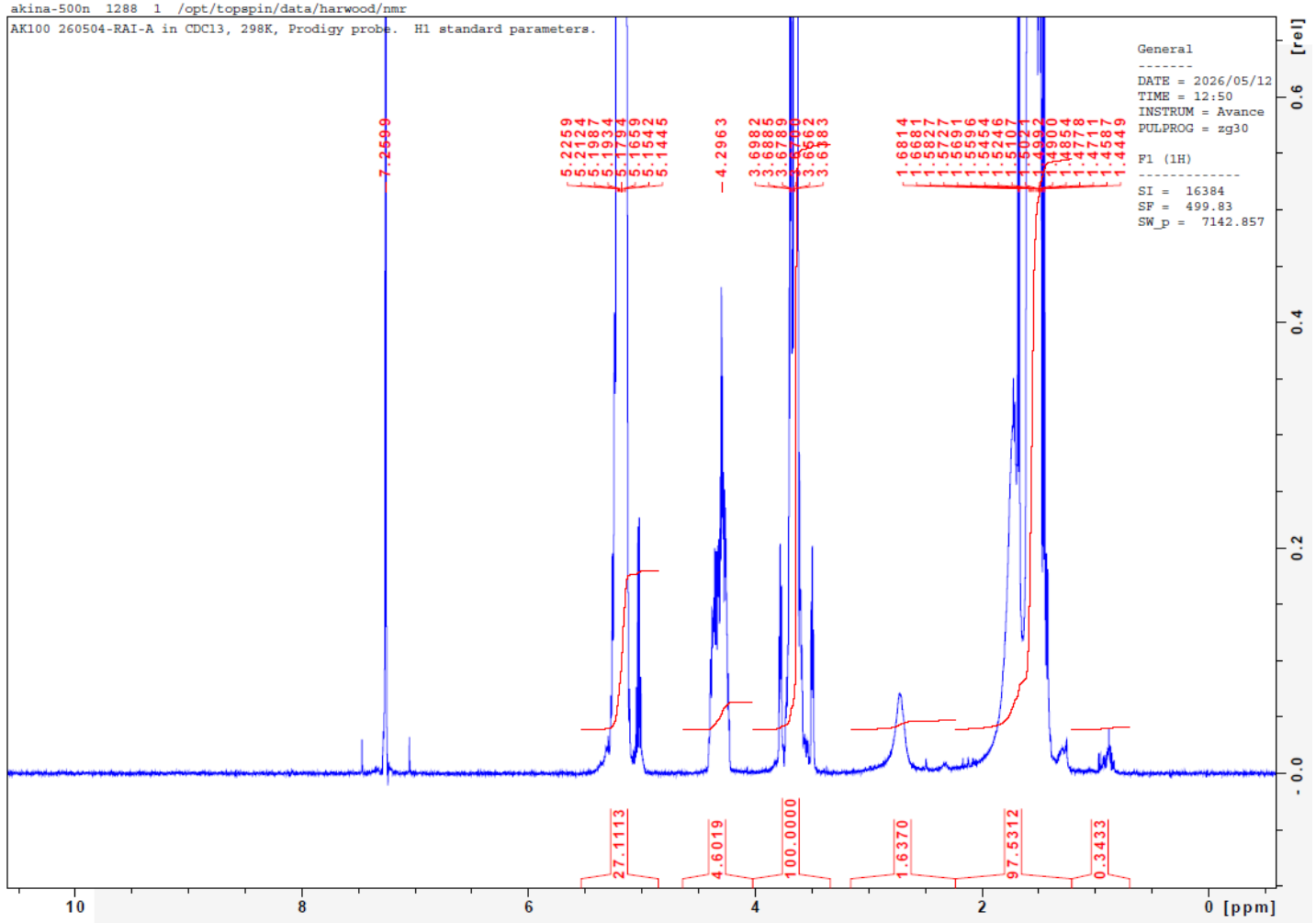
No. AK100

Certificate of Analysis



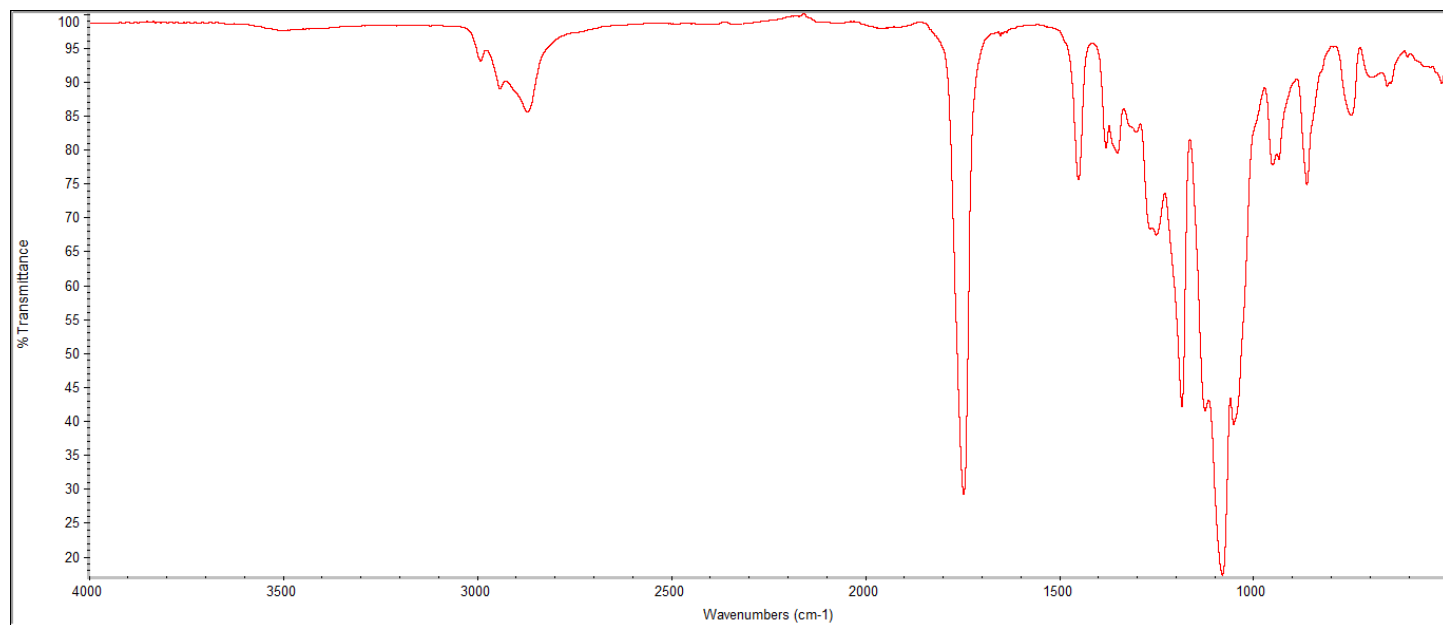
Product Name: Poly(DL-lactide)-*b*-Poly(ethylene glycol)-*b*-Poly(DL-lactide) triblock copolymers (Mw ~ 1,700:1,500:1,700) (Lot#: 260504RAI-A)

H-NMR



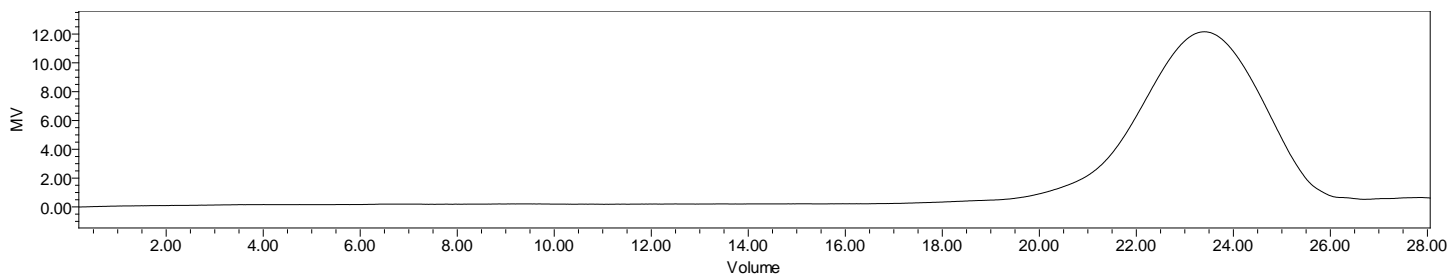
H-NMR Spectrum of copolymers in CDCl₃ (Bruker ≥300 MHz, PINMRF) NMR of PLA-PEG-PLA copolymer: EG/LA = 33*/36 (Mn EG/LA 1454*/2577 Da) *- from MFG data

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
PLA-PEG-PLA	5219	6418	1.23
PEG-Precursor*	1472*		

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

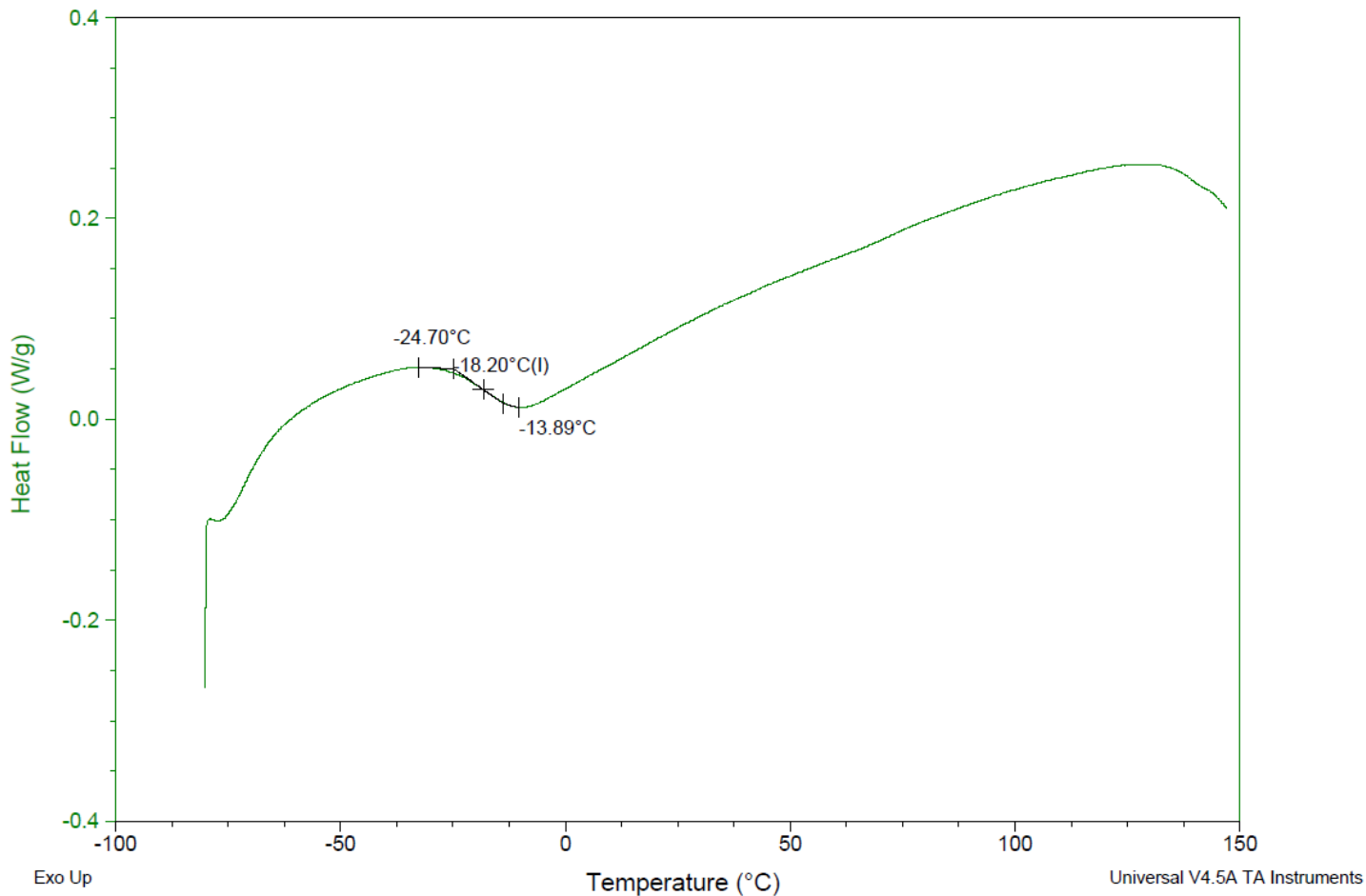
Sample: AK100 260504RAI-A
Size: 4.2000 mg
Method: Ramp

DSC

File: C:\...\COA\AK100 260504RAI-A.001

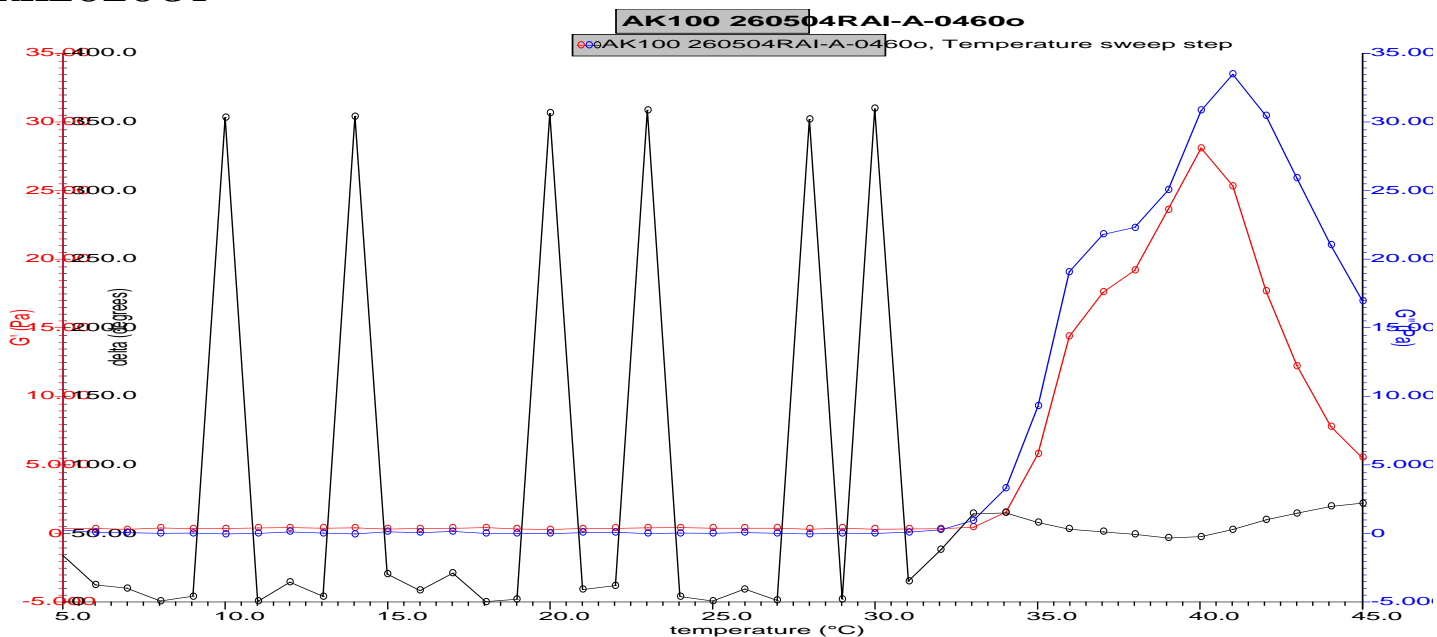
Run Date: 12-May-2026 11:25

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. Tg = -18.2 °C

RHEOLOGY



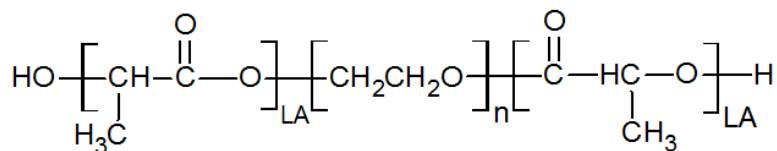
Rheology performed on AR2000 (TA instruments) with 60mm 2degree cone on 20% w/v polymer in water dissolved over 24 hours while stirring at 23°C. Viscosity of solution at 0.1 (sec⁻¹) and 5°C was measured (1 minute peak hold 5 second test intervals). Rheology performed by oscillating at constant 6.283 rad/s, 0.1% strain, in increments of 1°C ranging from 5-45°C with 1 minutes of temperature equilibration at each point.

Viscosity 20% w/v solution at 5°C	0.06703 Pa/s
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IV

Inherent Viscosity: 0.075 ± 0.015 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