

No. AK196

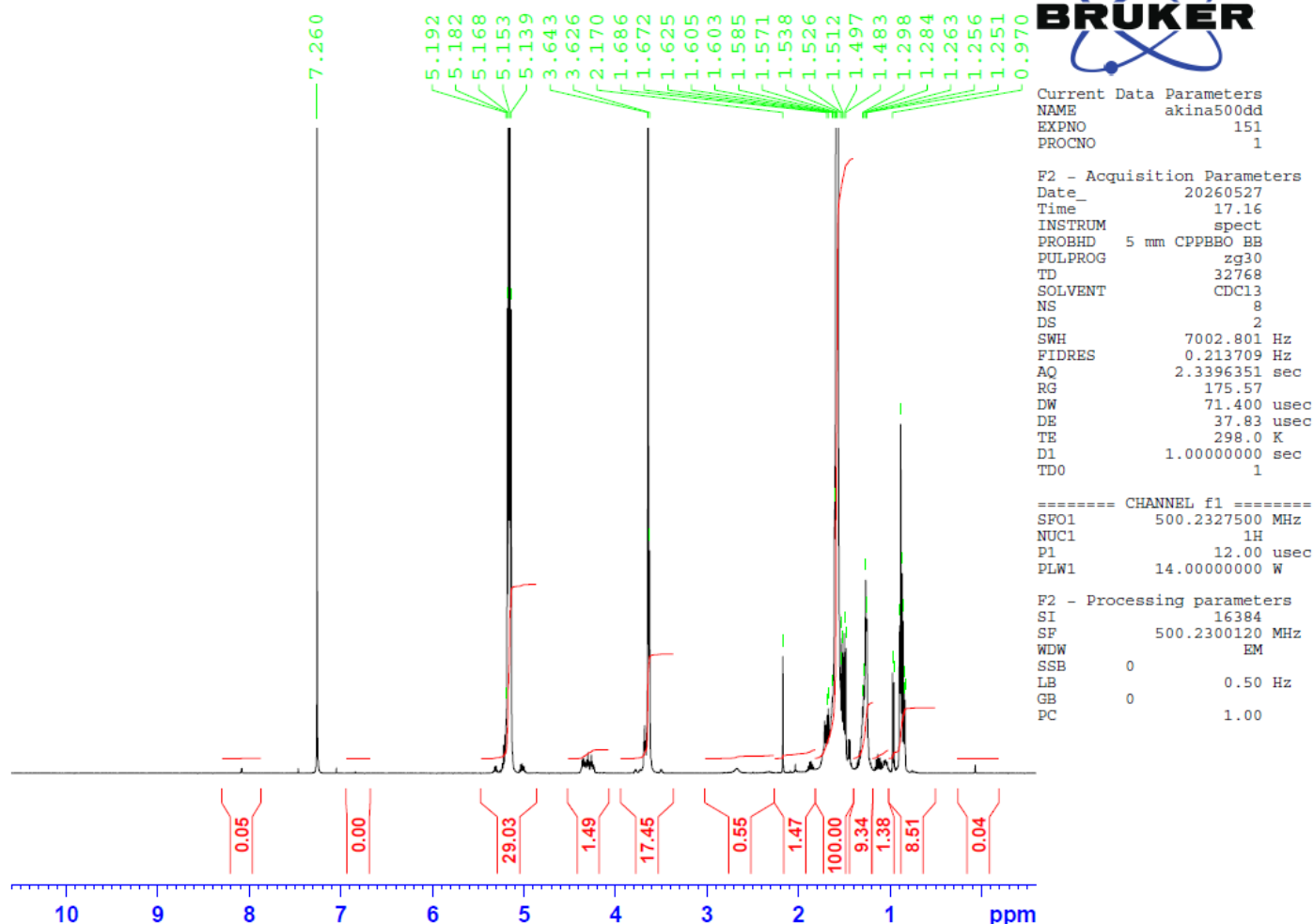
Certificate of Analysis



Product Name: Poly(L-lactide)-*b*-Poly(ethylene glycol)-*b*-Poly(L-lactide) triblock copolymers (5,000:1,000:5,000) (Lot#: 260520CES-A)

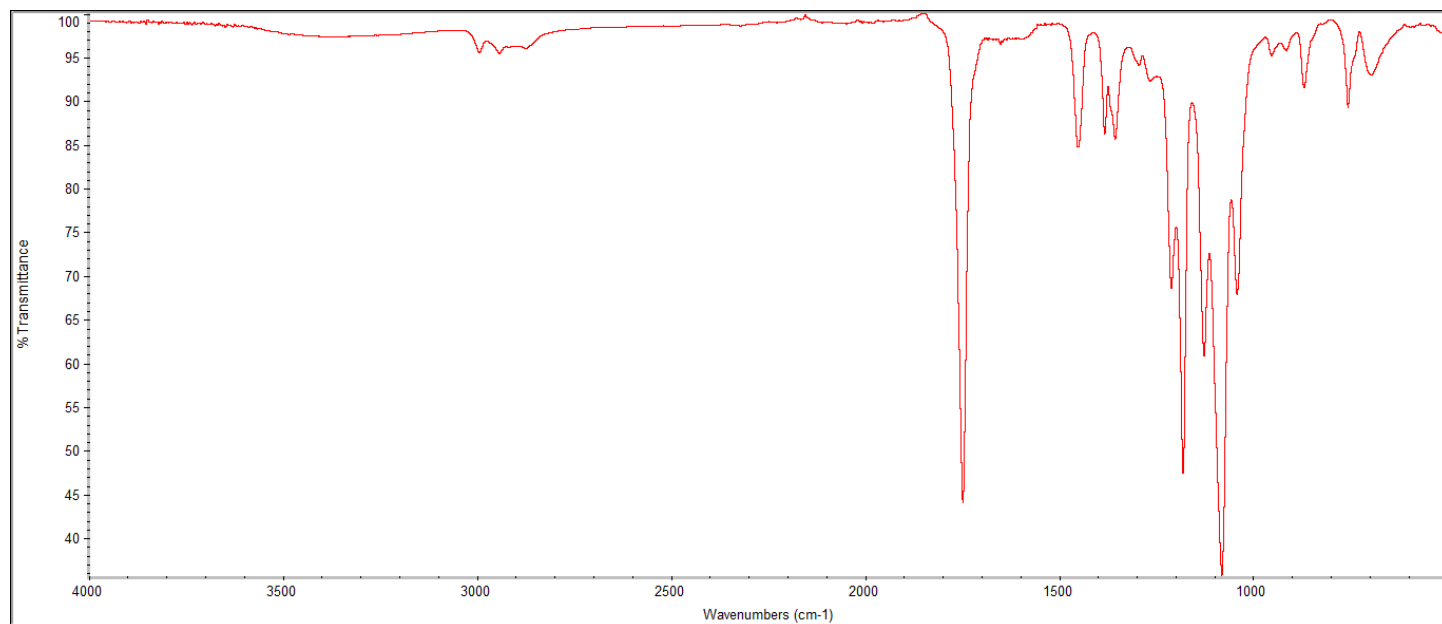
H-NMR

H1 standard parameters, cryoprobe prodigy, DD-500.
AK196 260520-CES-A in CDCl₃, 298K.



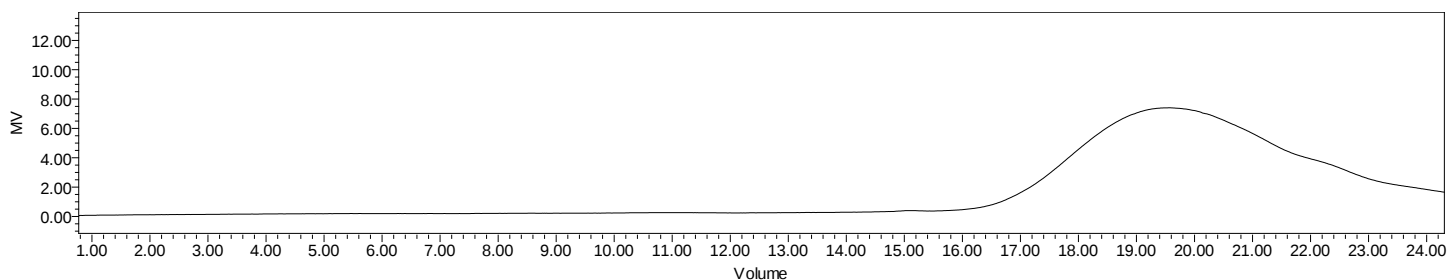
H-NMR Spectrum of copolymers in CDCl₃ (Bruker ≥300 MHz, PINMRF) NMR of PLLA-PEG-PLLA copolymer: EG*/LA =23*/153 (Mn EG*/LA 1013*/11020 Da) *- from MFG data

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
PLLA-PEG-PLLA	19,743	29,033	1.47
PEG-Precursor*	1013*		

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

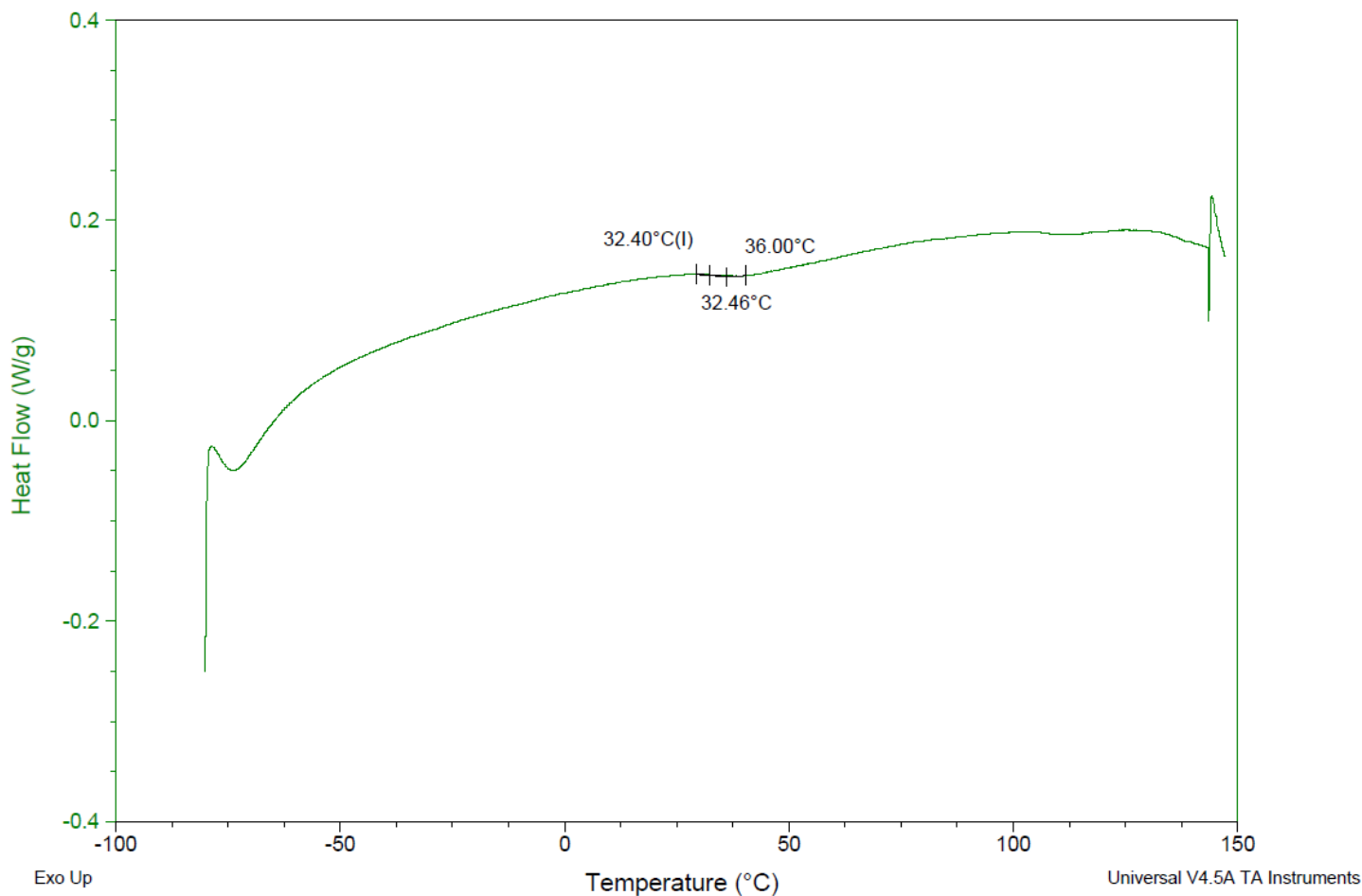
DSC

Sample: AKXXX 260520CES-A
Size: 4.7000 mg
Method: Ramp

DSC

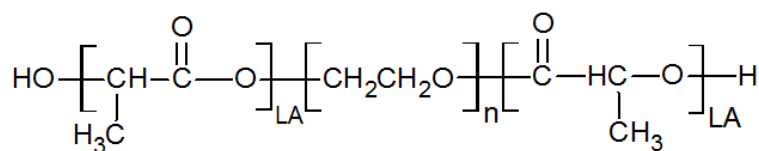
File: \\...\\COA\\AKXXX 260520CES-A.002

Run Date: 04-Jun-2026 15:58
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 = 32.40 °C

Structure of copolymers



Approved By:
Amie Tyler
Quality Manager