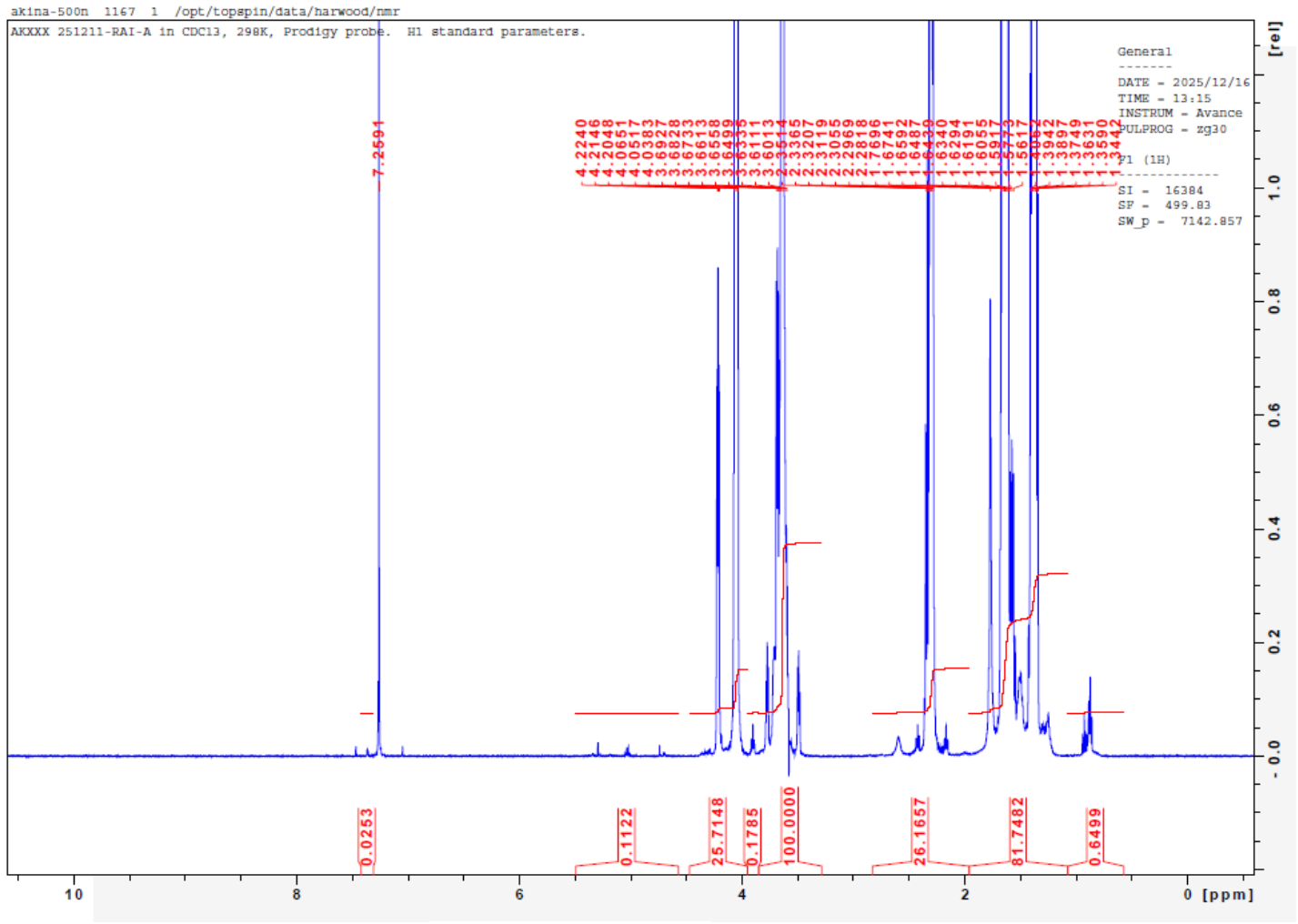
No. AK192 Certificate of Analysis

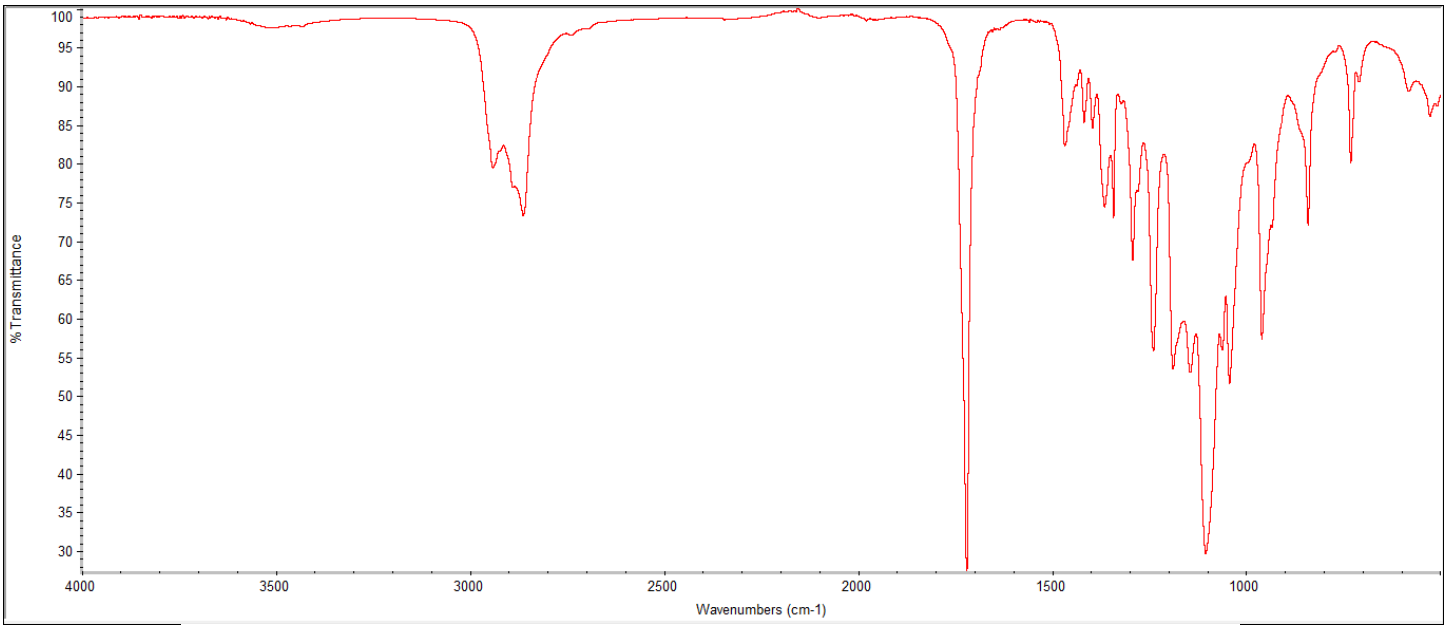
Product Name: Polycaprolactone-b-Poly(ethylene glycol)-b-Polycaprolactone (M_w ~1,000:1,500:1,000 Da) (Lot#: 251211RAI-A)

H-NMR



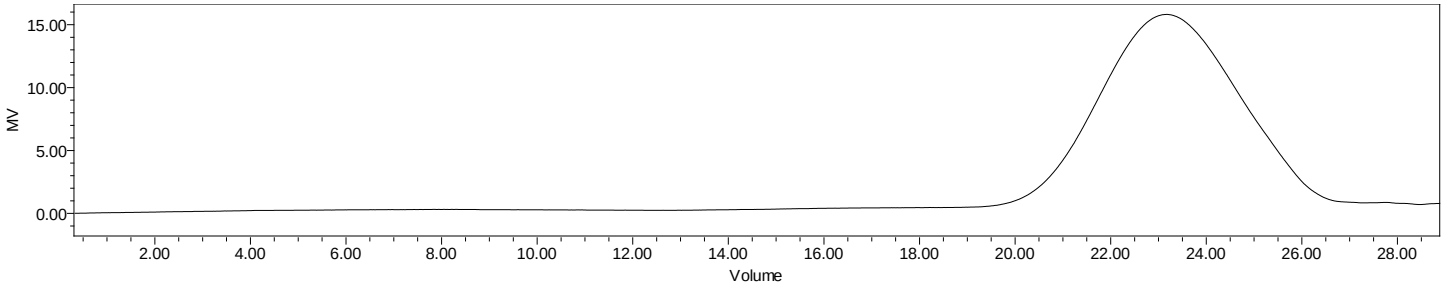
H-NMR Spectrum of copolymers in CDCl3 (Bruker ≥300 MHz, PINMRF) NMR of PCL-PEG-PCL copolymer: EG/CL =33*/17 (Mn EG/CL 1454*/1937 Da) *- from MFG data

FTIR



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

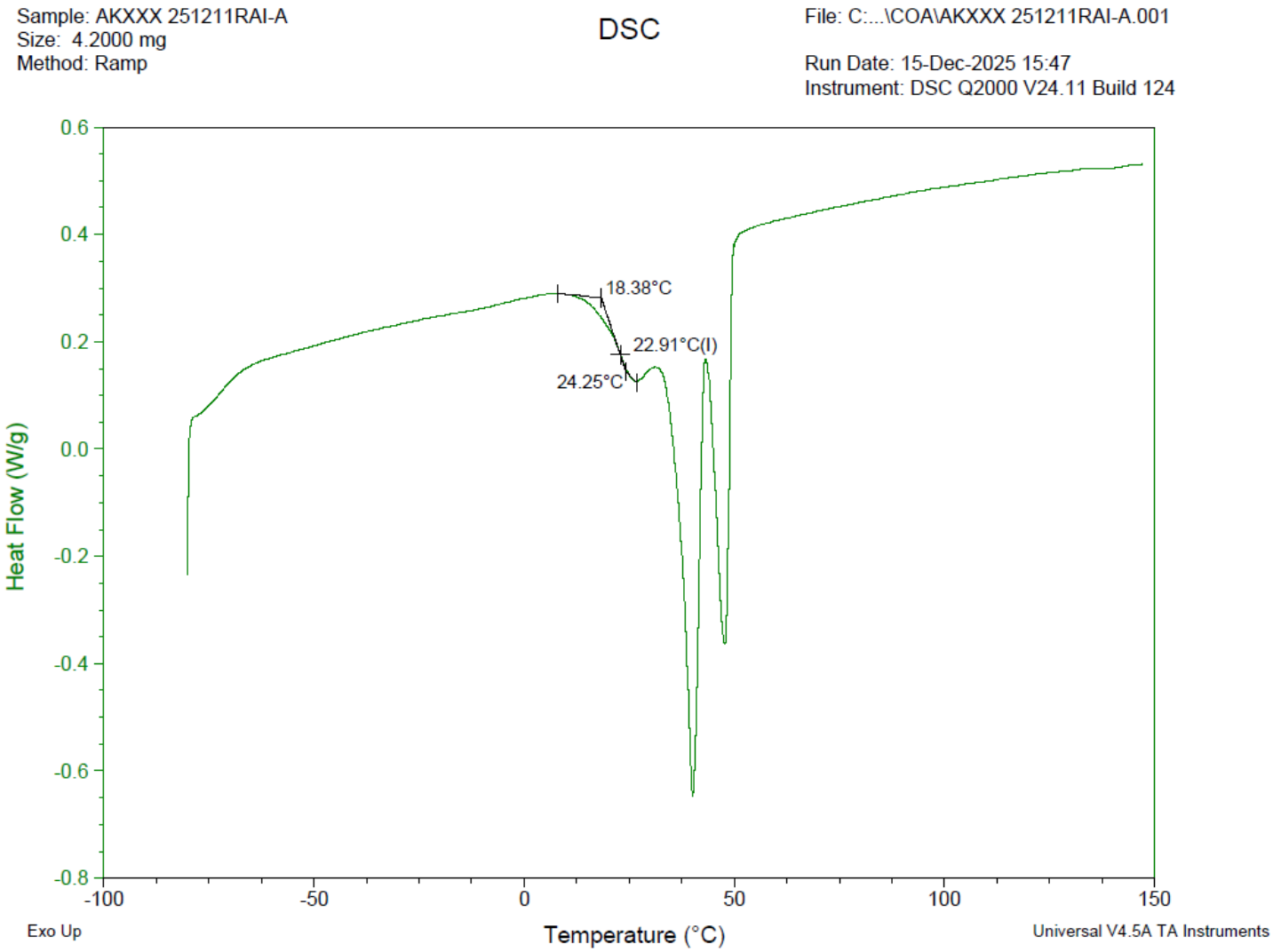
GPC-ES



Polymer	M_n (from GPC)	M_w (from GPC)	PDI
PCL-PEG-PCL	5054	6793	1.34
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

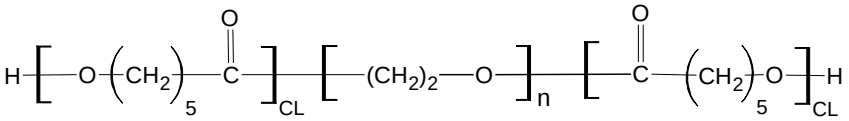


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 22.91 °C

IV

Inherent Viscosity: 0.096 ± 0.003 dL/g (calculated from kinematic viscosity at 2% w/v Acetone on Rheosense microVISC, n=3) at 25ºC.

Structure of copolymers



Approved By:
Amie Tyler
Quality Manager