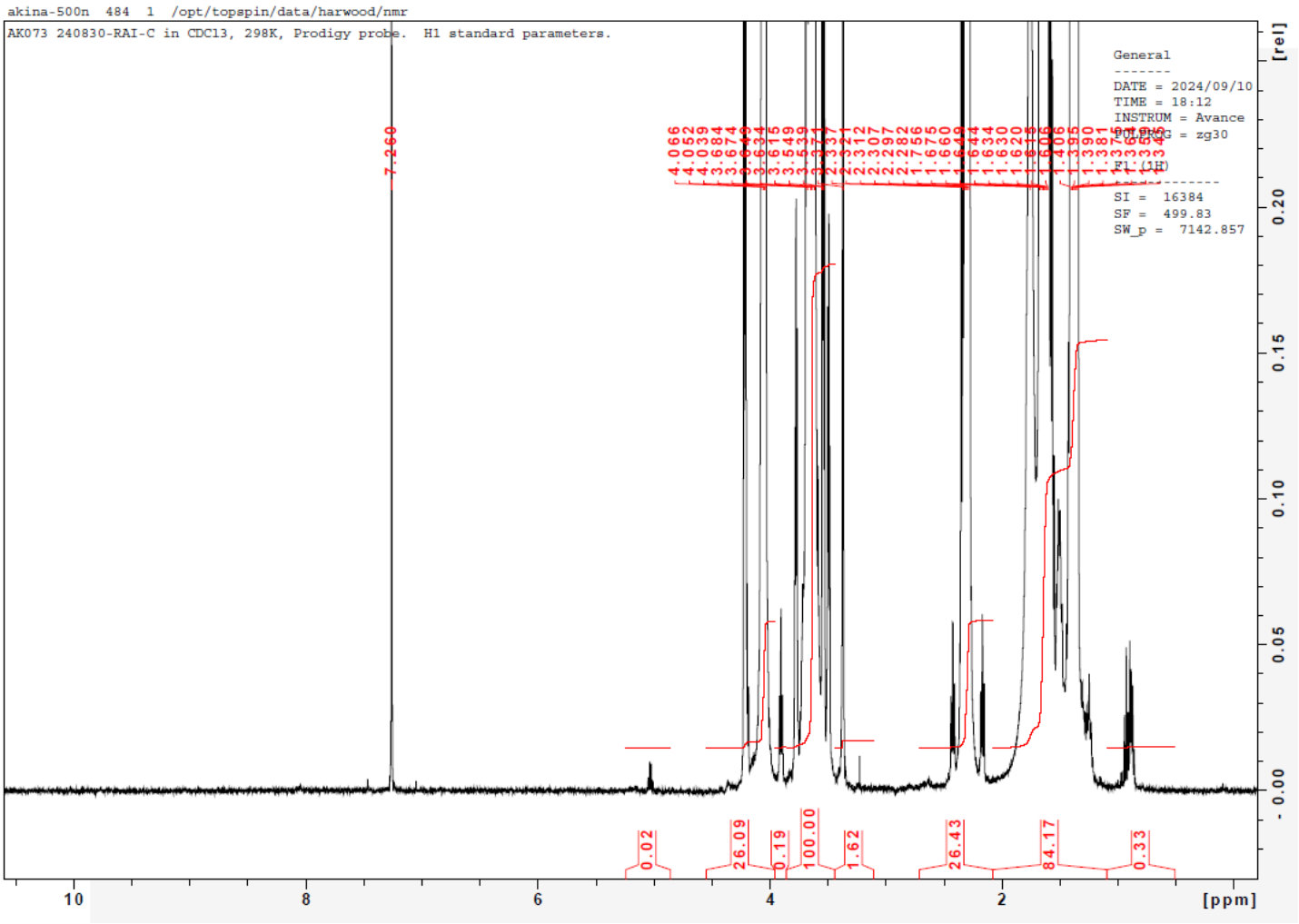
No. AK073 Certificate of Analysis

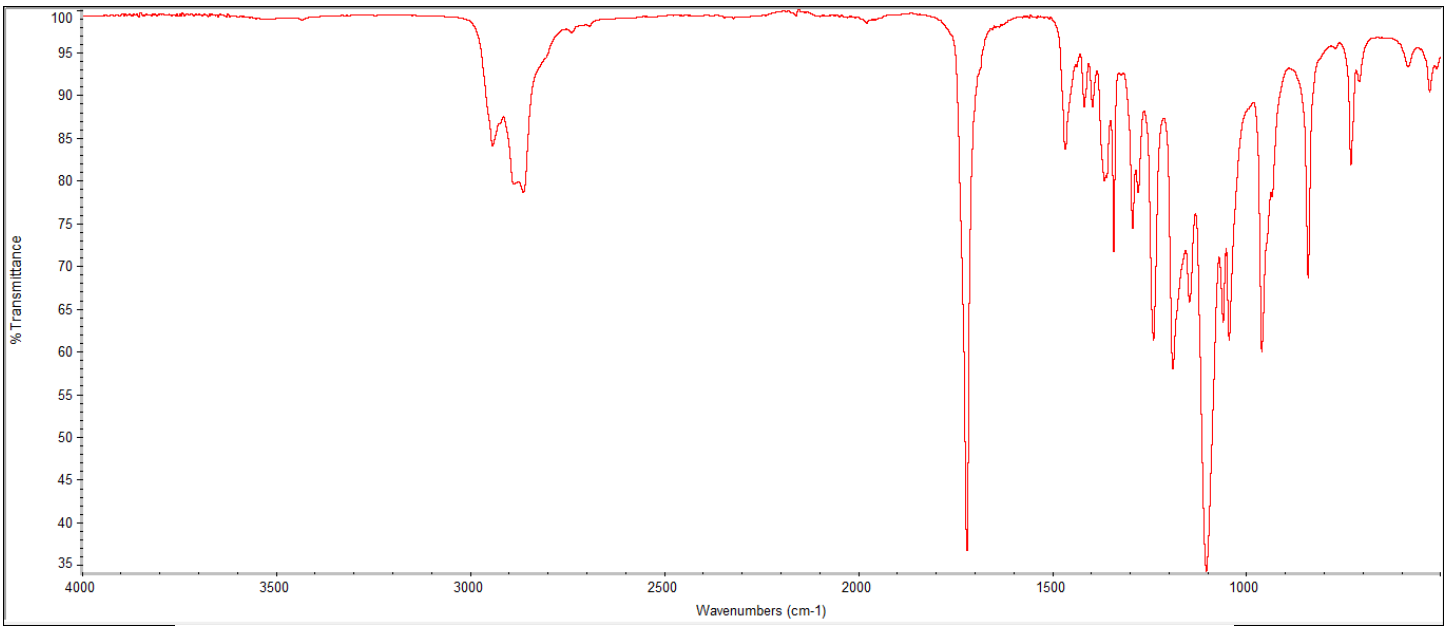
Product Name: Methoxy Poly(ethylene glycol)-*b*-Polycaprolactone Copolymers (2,000:2,000 Da) (Lot#: 240830RAI-C)

H-NMR



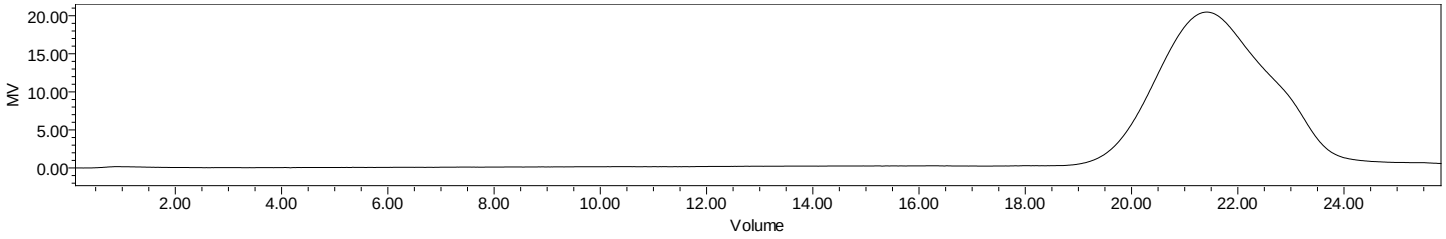
H-NMR Spectrum of copolymers in CDCl3 (Bruker ≥300 MHz, PINMRF) NMR of mPEG-PCL copolymer: EG*/CL = 46*/24 (EG*/CL 2026*/2740) *- from MFG data

FTIR



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

GPC-ES

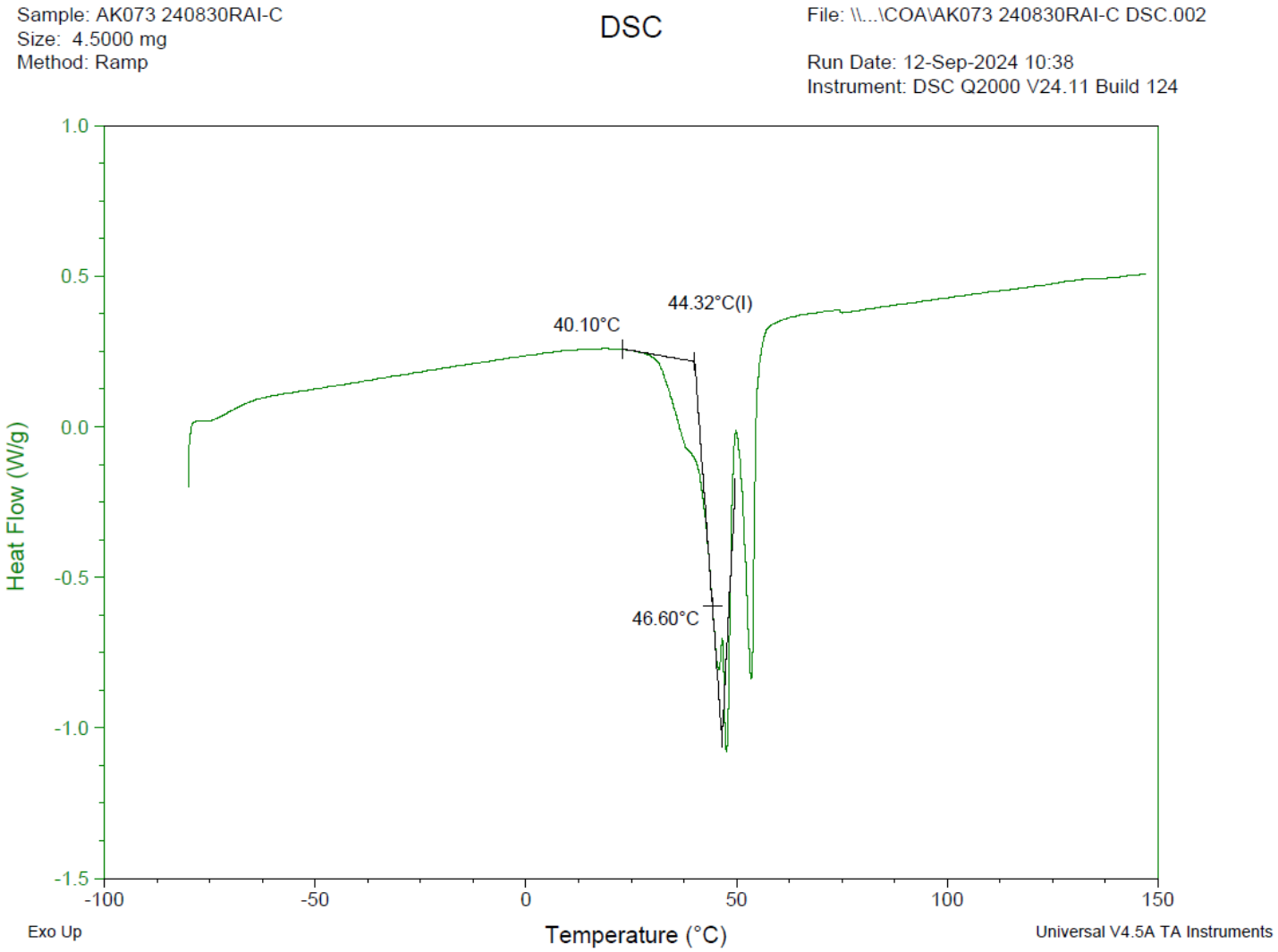


Polymer	M_n (from GPC)	M_w (from GPC)	PDI
mPEG-PCL	6277	9772	1.56
PEG-Precursor*	2044*		

*- 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.

DSC

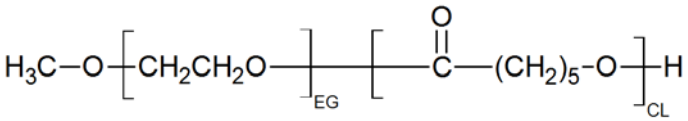


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 44.32 °C

IV

Inherent Viscosity: 0.142 dL/g (calculated from kinematic viscosity at 2% w/v Acetone on Rheosense microVISC, n=3) at 25ºC.

Structure of mPEG-PCL copolymers



Approved By:
Amie Tyler
Quality Manager