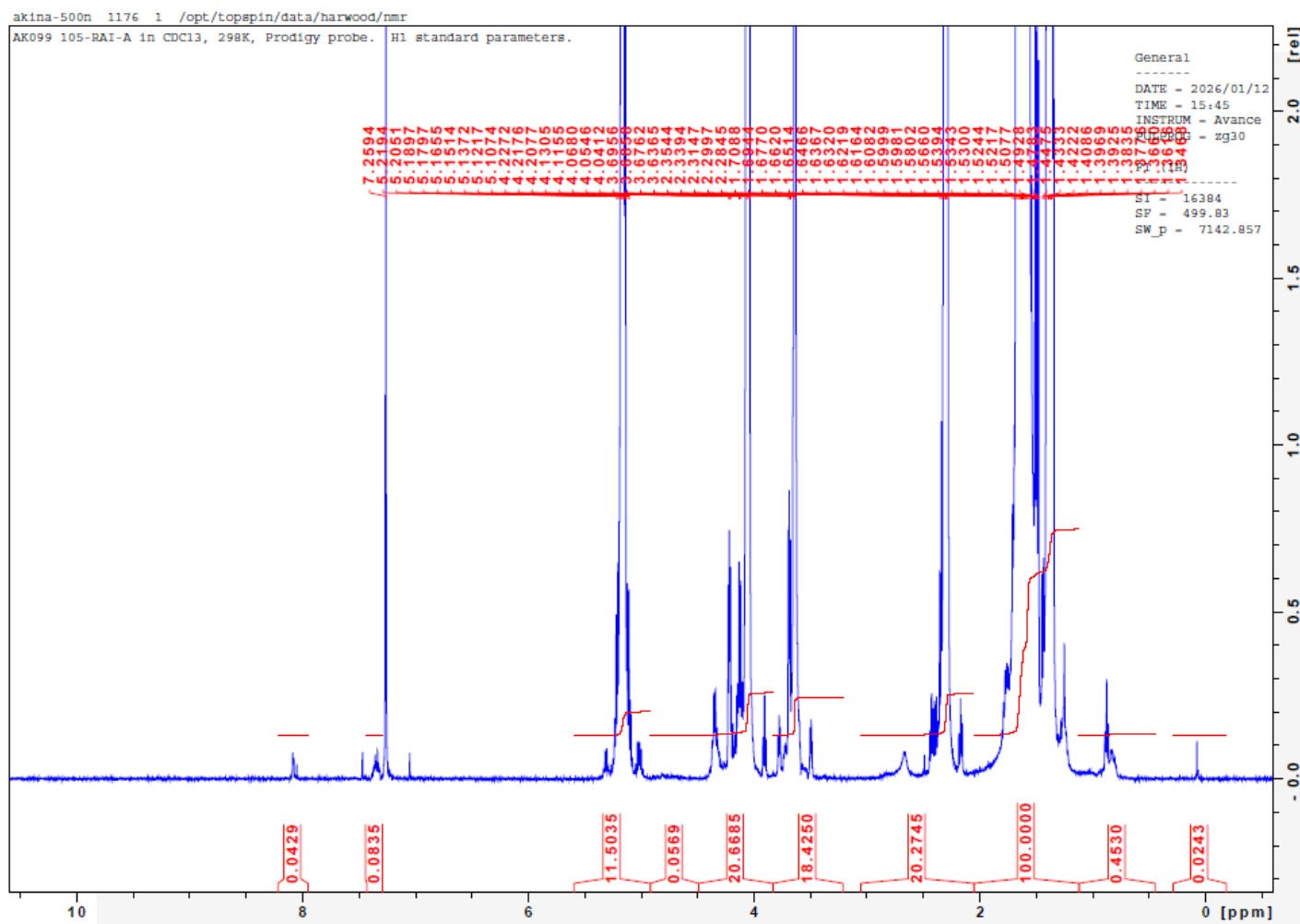


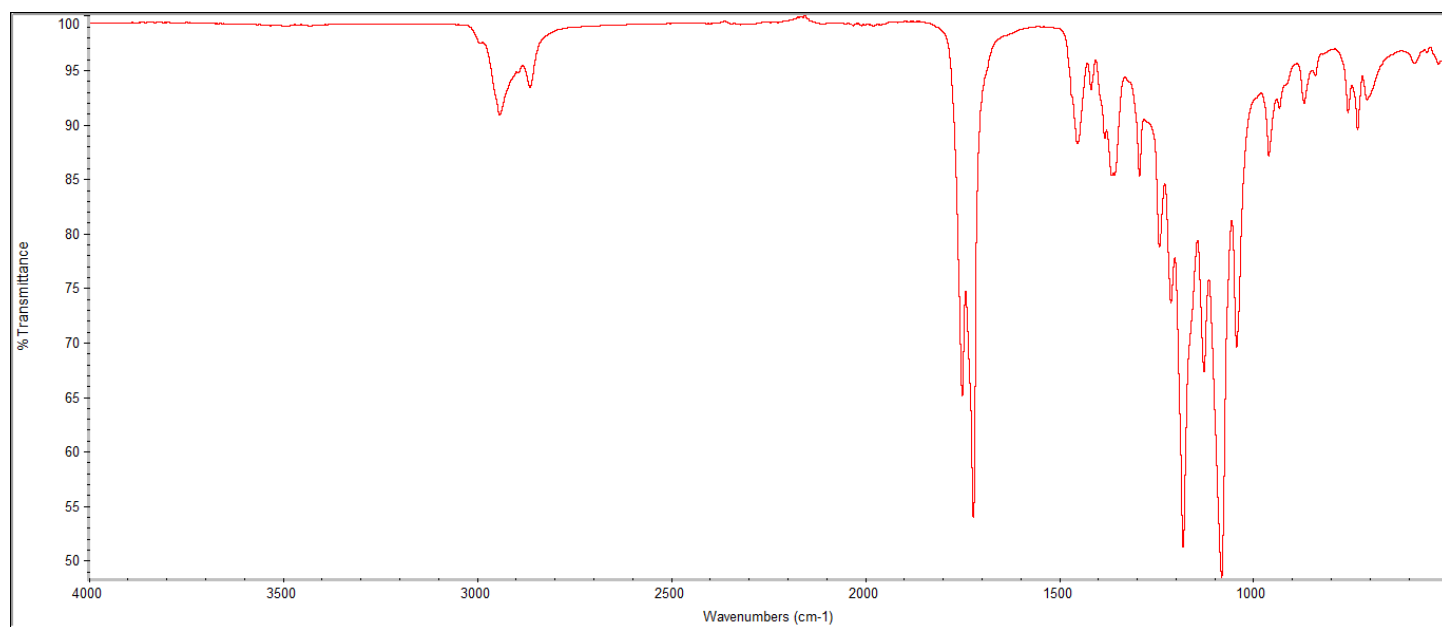
Product Name: Poly(D,L)lactide-b-Polycaprolactone-b-Poly(ethylene glycol)-b-Polycaprolactone-b-Poly(D,L)lactide (MW ~ 5,000-5,000-2,000-5,000-5,000 Da)  
(Lot#: 260105RAI-B)

## H-NMR



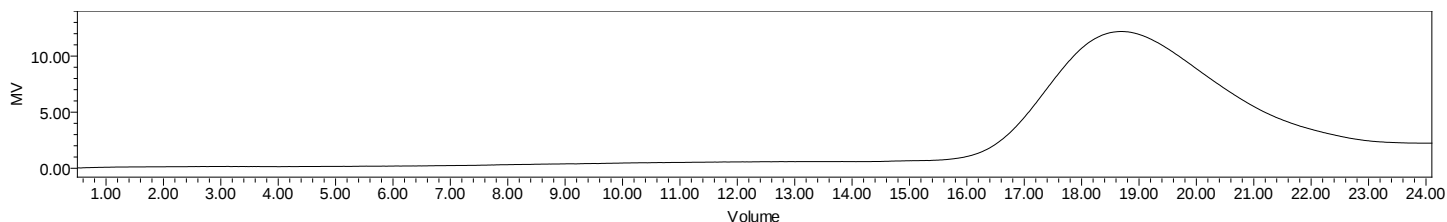
**H-NMR** Spectrum of copolymers in CDCl<sub>3</sub> (Bruker ≥300 MHz, PINMRF) NMR of PLCL-PEG-PLCL copolymer: EG/LA-CL =49\*/122-110 (Mn EG/LA:CL 2159\*/8811-12548 Da) LA:CL 53%:47% \*- from MFG data

## FTIR



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

## GPC-ES



| Polymer        | M <sub>n</sub> (from GPC) | M <sub>w</sub> (from GPC) | PDI  |
|----------------|---------------------------|---------------------------|------|
| PLCL-PEG-PLCL  | 29,732                    | 39,264                    | 1.32 |
| PEG-Precursor* | 2179*                     |                           |      |

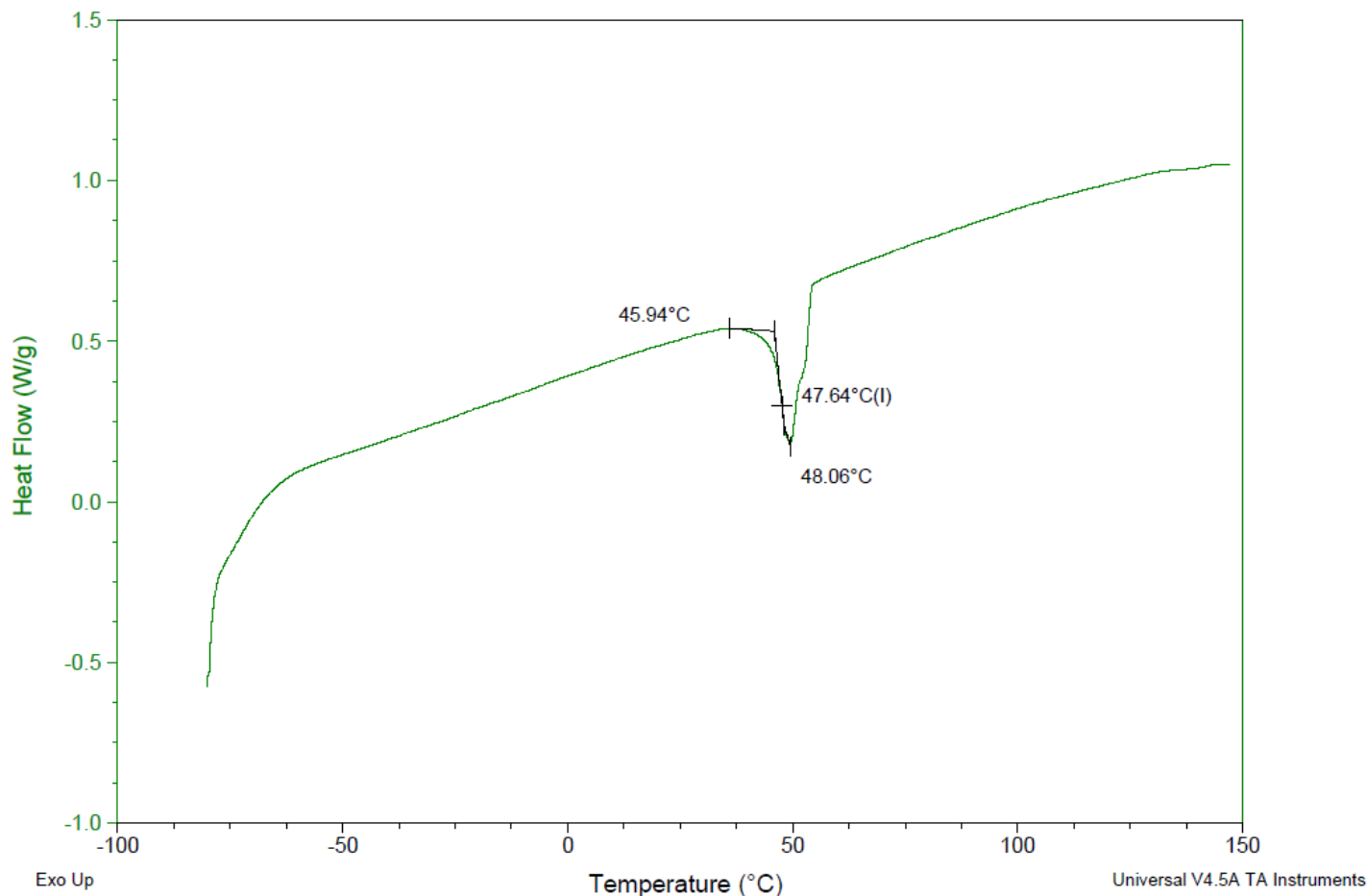
**GPC-ES Analysis Method:** Waters Breeze 2 system with 1 ml/min THF flow across three GPC columns. Detection via refractive index, calibrated against polystyrene standards. \*- from MFG data

## DSC

Sample: AK099 260105RAI-B  
Size: 1.9000 mg  
Method: Ramp

### DSC

File: C:\COA\AK099 260105RAI-B.001  
Run Date: 13-Jan-2026 10:41  
Instrument: DSC Q2000 V24.11 Build 124

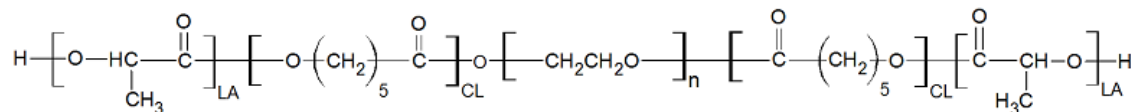


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibration 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 47.64 °C

## IV

**Inherent Viscosity:**  $0.191 \pm 0.009$  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