

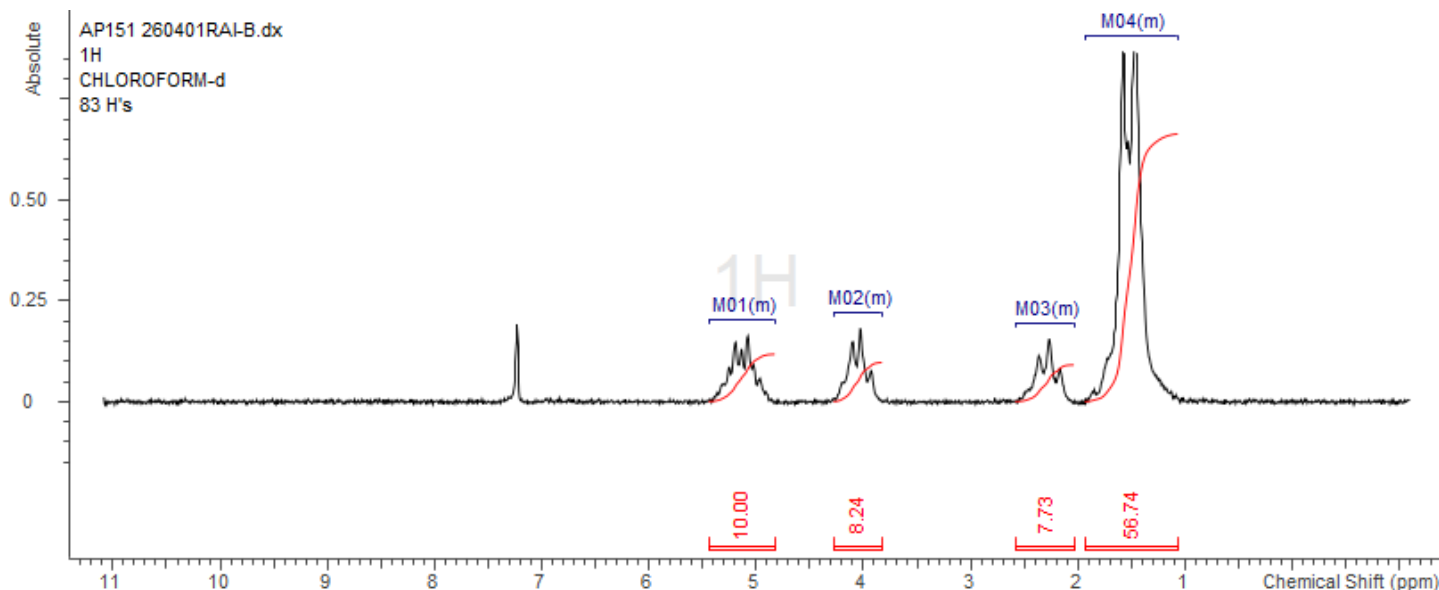
No. AP151

Certificate of Analysis



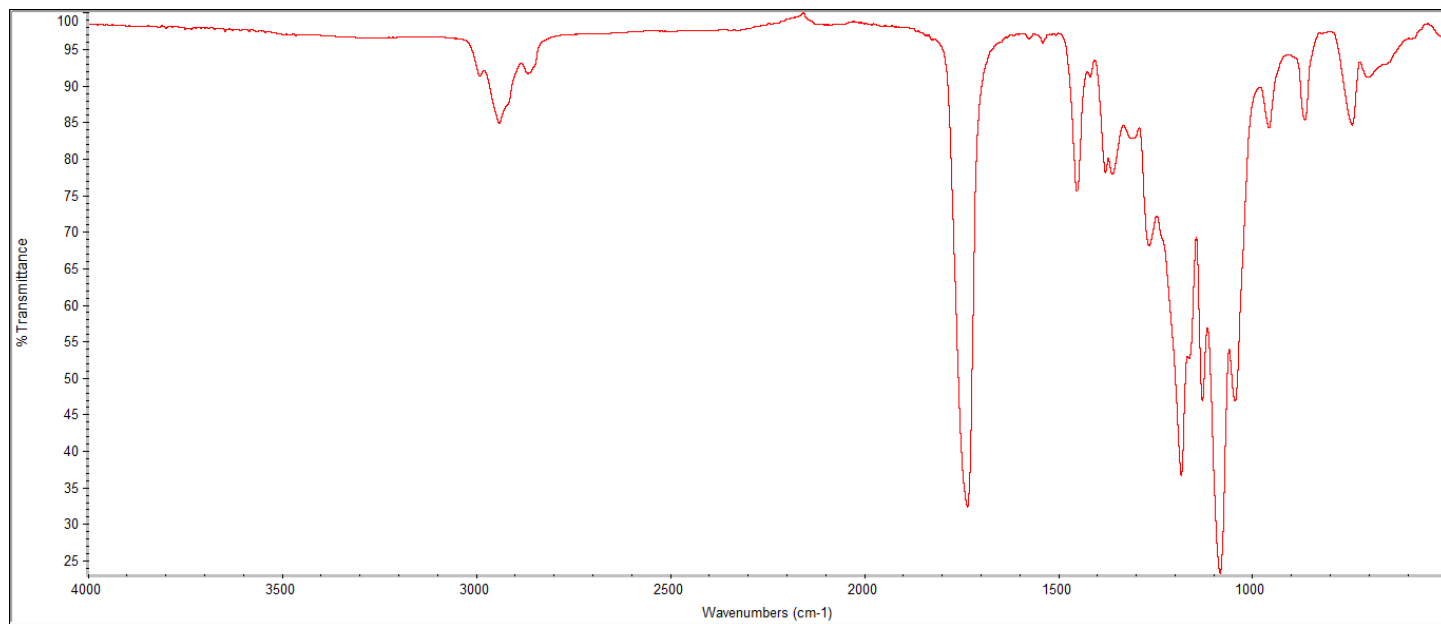
Product Name: Poly((D,L)Lactic-co-caprolactone) Copolymers acid end-capped
(70:30 LA:CL, M_n : 75,000-85000 Da) (Lot#: 260401RAI-B)

H-NMR



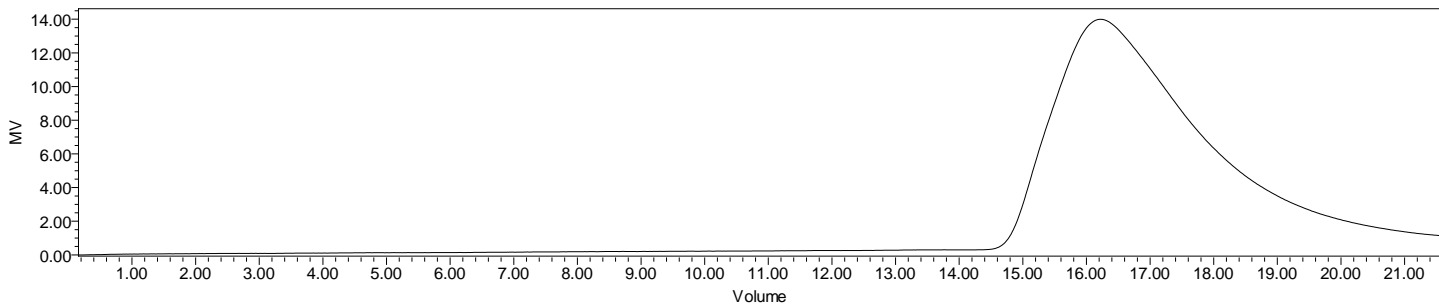
H-NMR Spectrum of copolymers in CDCl₃ (NMReady-60e, Nanalysis 60 MHz) NMR of PDLCL copolymer: LA-CL =71%-29% molar ratio (LA:CL 61%:39% w:w)

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
PDLCL	79,613	125,464	1.58

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

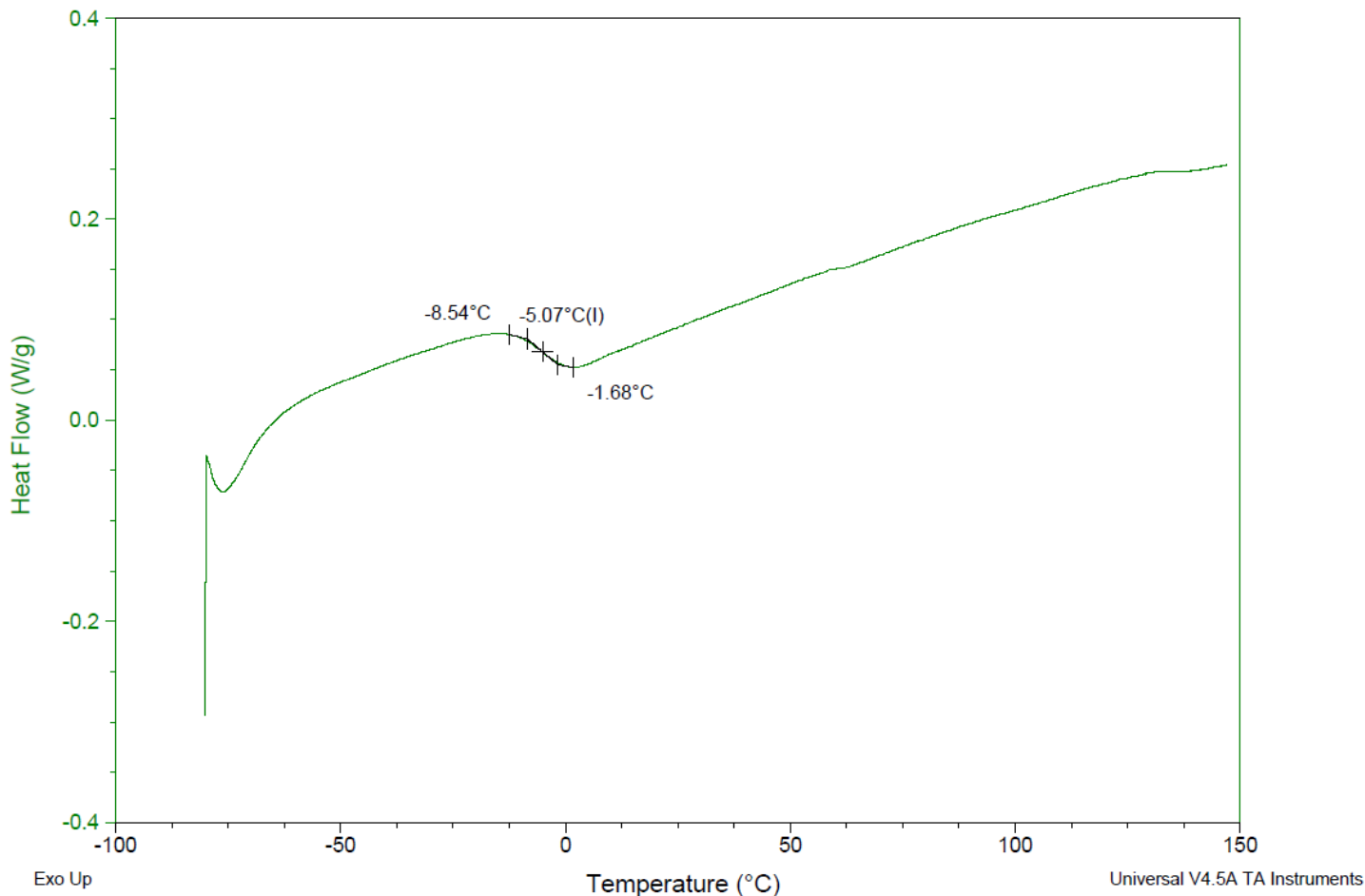
Sample: AP151 260401RAI-B
 Size: 4.8000 mg
 Method: Ramp

DSC

File: C:\...\COA\AP151 260401RAI-B.001

Run Date: 21-Apr-2026 11:15

Instrument: DSC Q2000 V24.11 Build 124

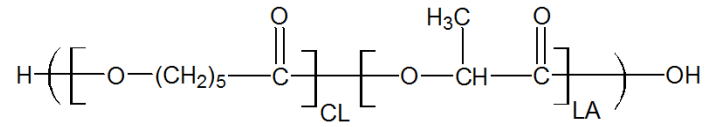


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = -5.07 °C

IV

Inherent Viscosity: 0.379 ± 0.028 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