

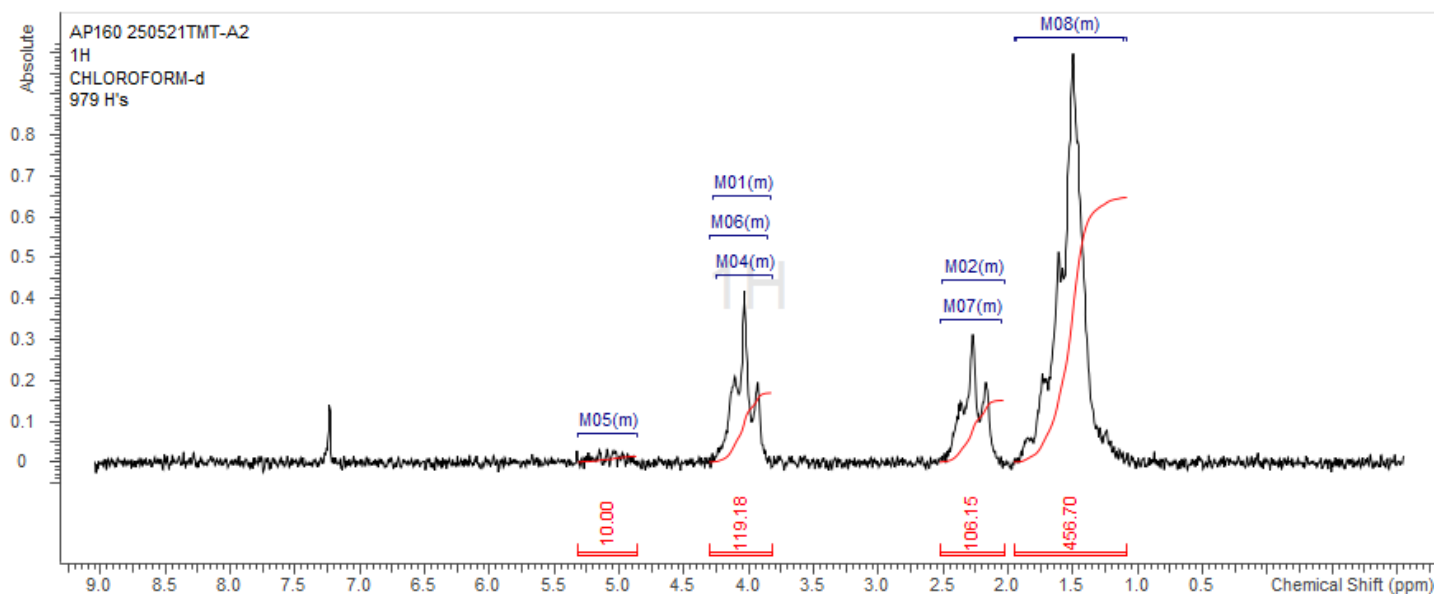
No. AP322

Certificate of Analysis



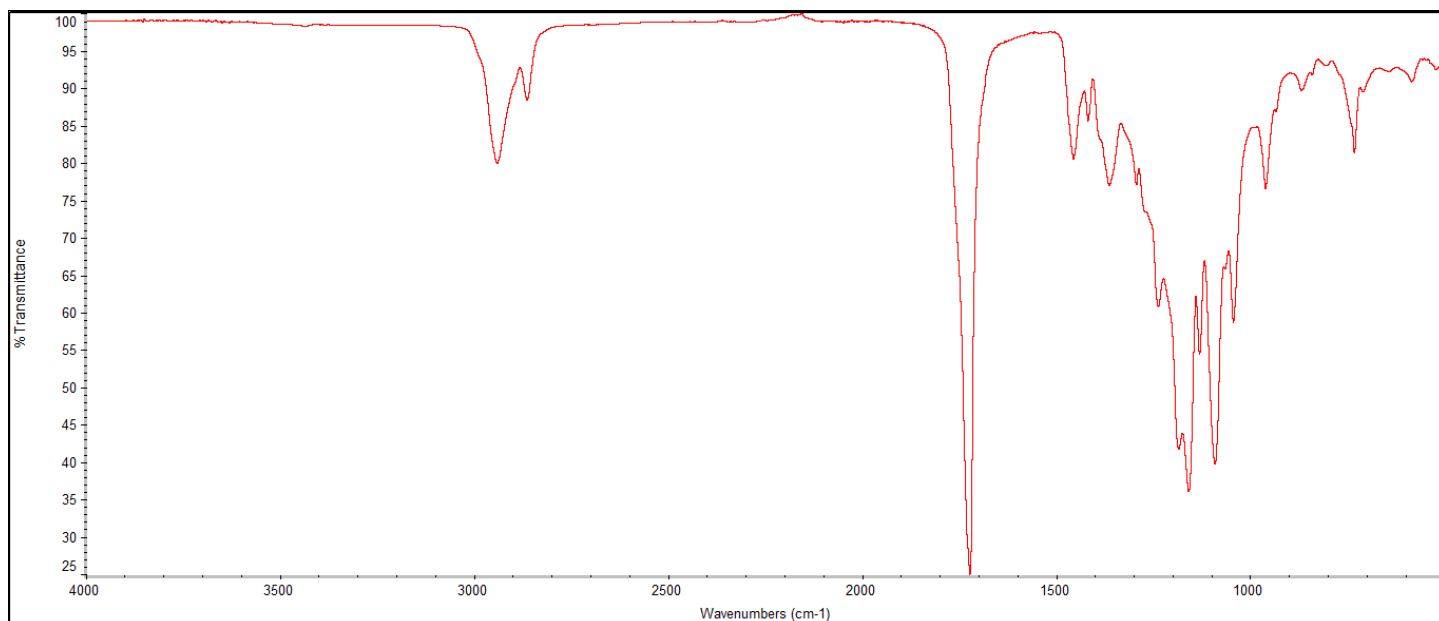
Product Name: Poly(L-lactide-co-caprolactone) copolymer acid endcap (15:85 LA:CL,
 M_n : 75,000-85,000 Da) (Lot#: 250521TMT-A)

H-NMR



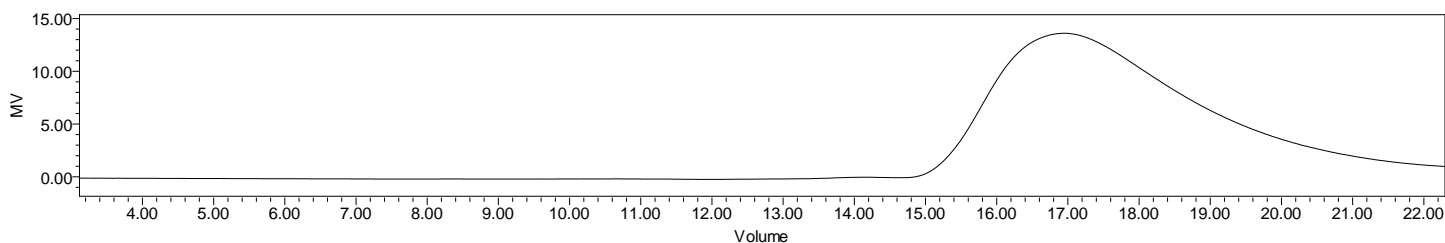
H-NMR Spectrum of copolymers in $CDCl_3$ (NMReady-60e, Nanalysis 60 MHz) NMR of PLGA copolymer: LA-GA = 14%:86 % molar ratio (LA:GA 10%:90% w:w)

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
PLLCL	66,532	87,989	1.32

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.

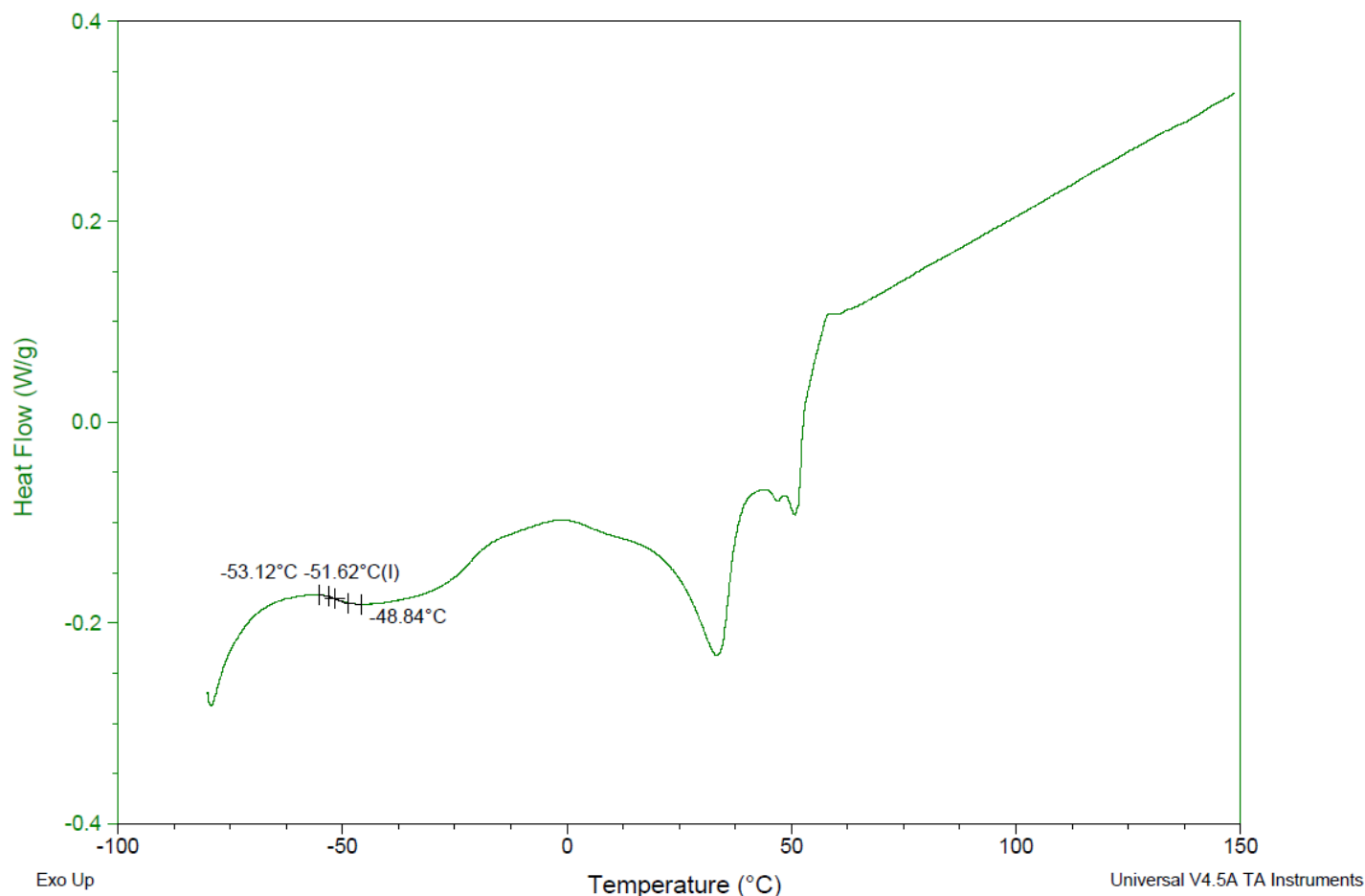
DSC

Sample: AP160 250516TMT-A
Size: 3.8000 mg
Method: Modulate-no-eqb

DSC

File: C:\...\COA\AP160 250516TMT-A DSC.001

Run Date: 27-May-2025 14:13
Instrument: DSC Q2000 V24.11 Build 124

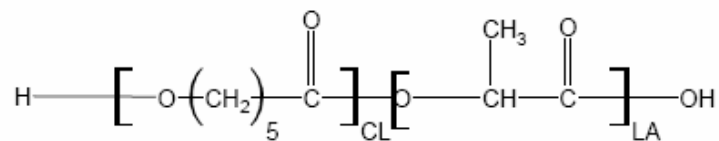


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = -51.62 °C

IV

Inherent Viscosity: 0.381 ± 0.017 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