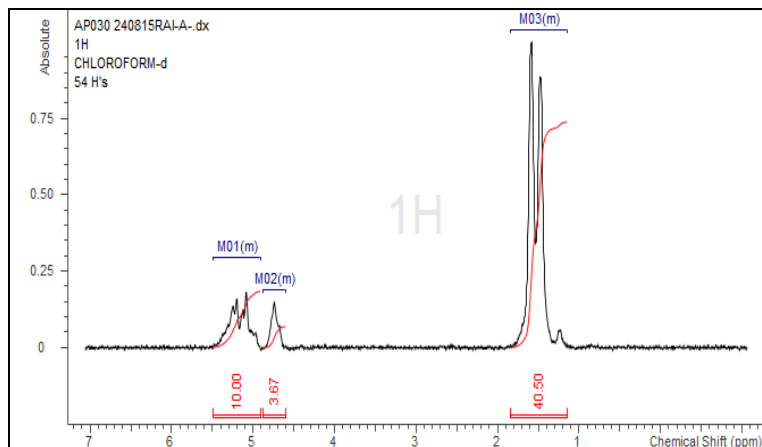


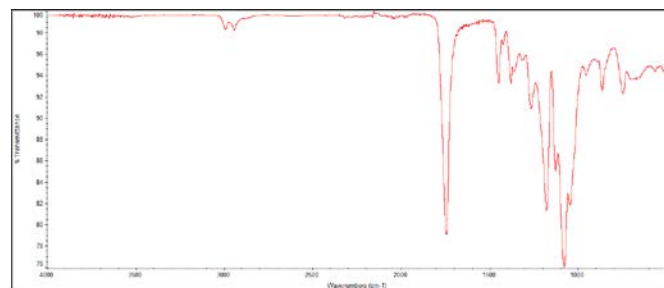
No. AP030

Certificate of Analysis

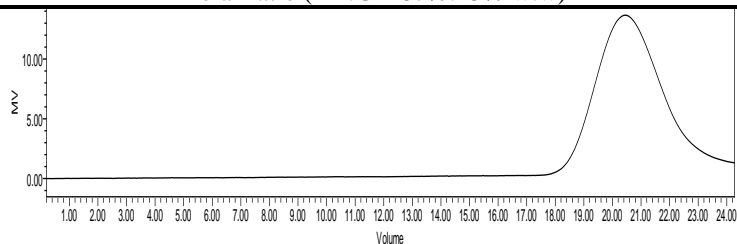
Product Name: Poly(lactide-co-glycolide) ester endcapped (85:15 LA:GA,
 M_n : 10,000 -15,000 Da) (Lot#: 240815RAI-A)



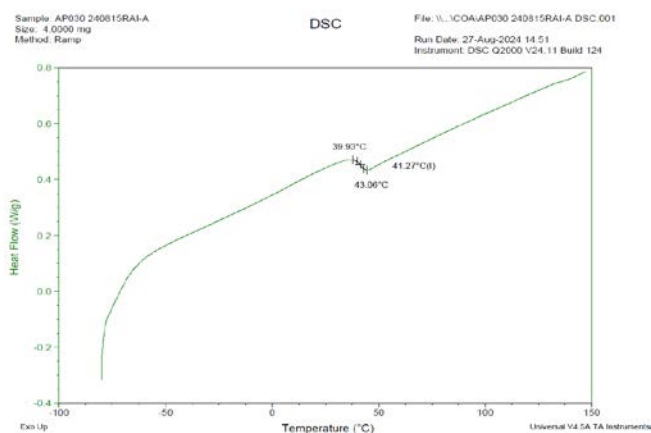
H-NMR Spectrum of copolymers in CDCl₃ (NMReady-60e, Nanalysis 60 MHz) NMR of PLGA Copolymer: LA:GA 84%:16% molar ratio (LA:GA 87%:13% w:w)



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



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.

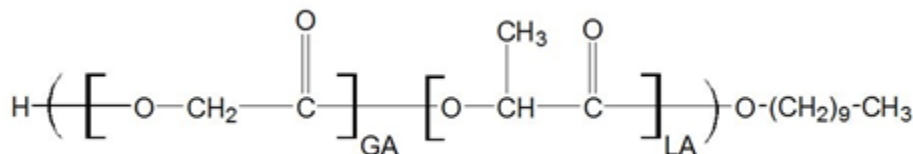


DSC Testing: 1-5 mg sample tested in crimped aluminum pan on a TA Instruments Model Q2000 with procedure equilibraion 100 °C, isothermal 5 minutes, equilibrate -80 °C, data on, ramp 10 °C/min to 150 °C. Tg = 41.27 °C

Polymer	M_n (from GPC)	M_w (from GPC)	PDI
PLGA	11,620	19,881	1.71

Inherent Viscosity: 0.194 dL/g (calculated from kinematic viscosity at 2% w/v acetone on Rheosense microVISC, n=3) at 25°C.

- Structure of PLGA copolymers**



Approved By:
Amie Tyler
 Quality Manager