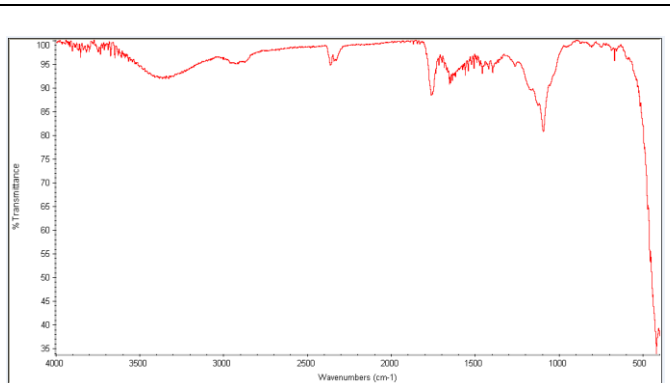
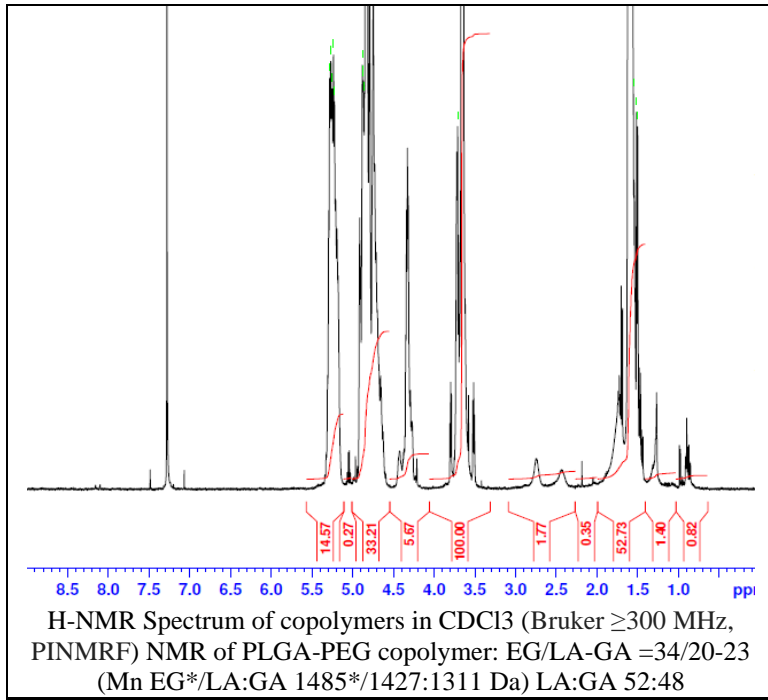


# No. AK019

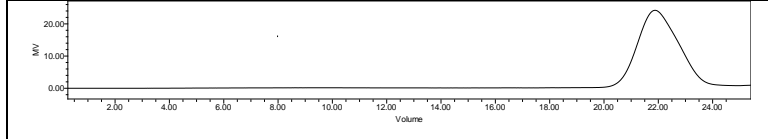
# Certificate of Analysis



Product Name: Poly(lactide-co-glycolide)-b-Poly(ethylene glycol)-b-Poly(lactide-co-glycolide) copolymers (1,500-1,500-1,500, 1:1 LA:GA) Lot #191003RAI-A



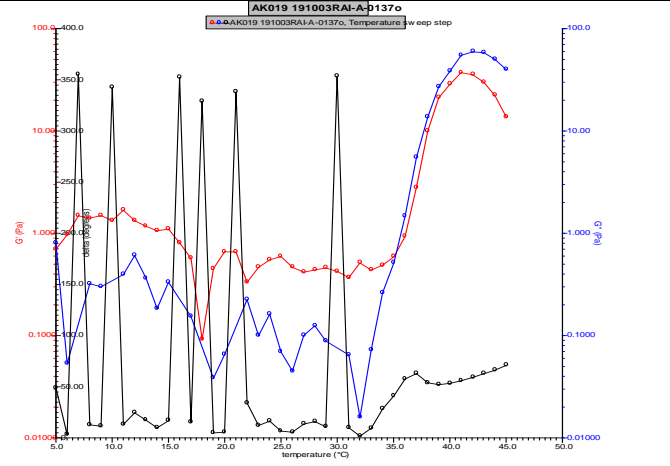
FTIR Analysis: Collected from cast-film on KBr salt-plate placed in Nicolet Avatar 320 spectrometer and analyzed in transmission mode.



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

Polymer	M <sub>n</sub> (from GPC)	M <sub>w</sub> (from GPC)	PDI
PLGA-PEG	5209	6422	1.23
PEG precursor*		1485*	

\* - from MFG data



Rheology performed on AR2000 (TA instruments) with 60mm 2degree cone on 20% w/v polymer in water dissolved over 3 days with stirring at 4°C. Viscosity of solution at 0.1 (sec<sup>-1</sup>) and 5°C was measured (1minute peak hold 5 second test intervals). Rheology performed by oscillating at constant 6.283 rad/s, 0.1% strain, in increments of 1°C ranging from 5-45°C with 1 minutes of temperature equilibration at each point.

Viscosity 20% w/v solution at 5°C **.05941 Pa/s**

## Structure of PLGA-PEG-PLGA

