

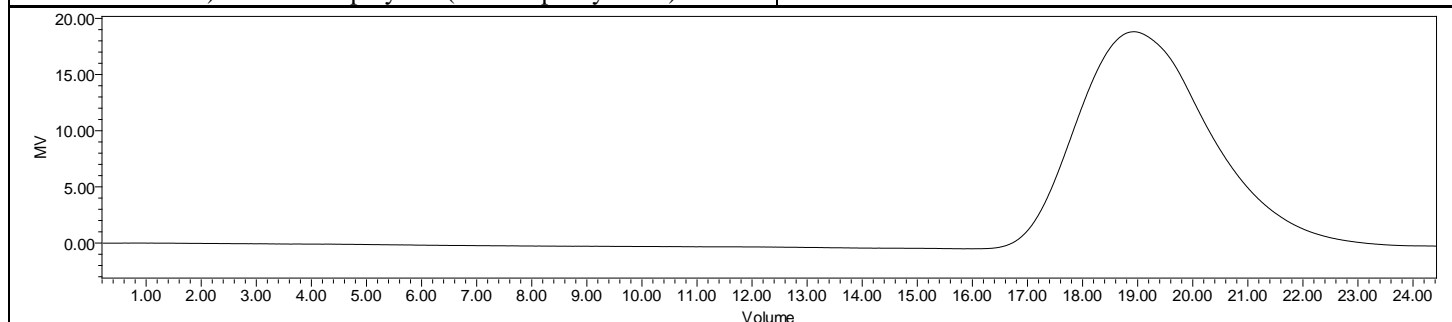
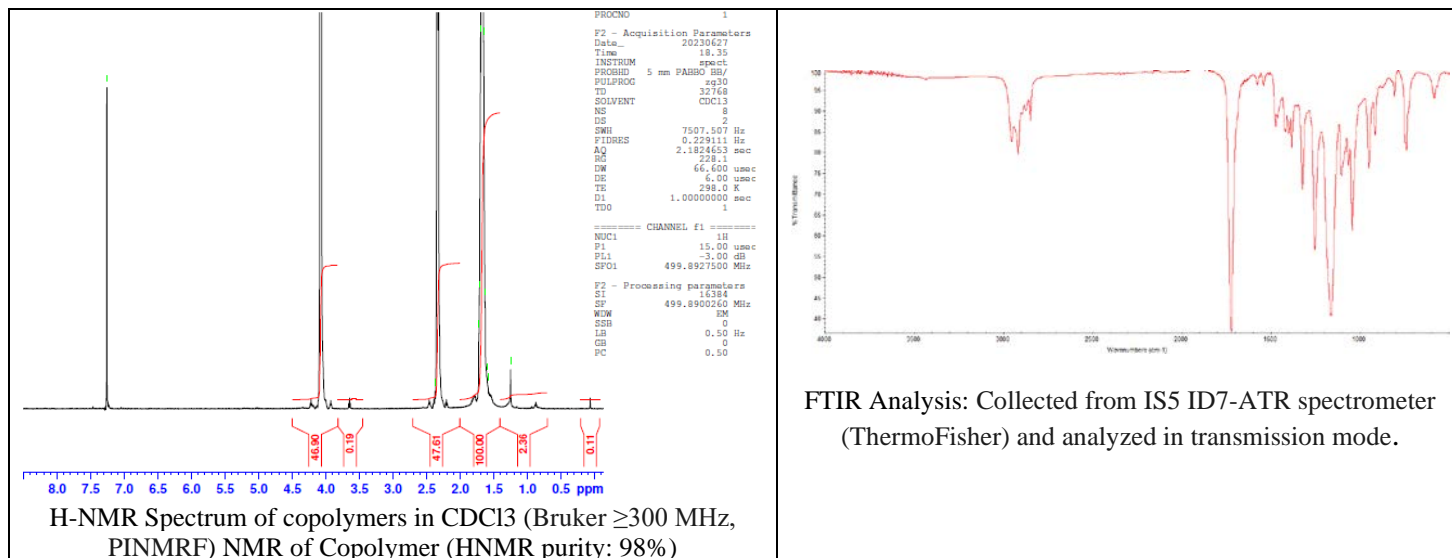
No. AP299

Certificate of Analysis



Product Name: Poly(δ -valerolactone) acid endcap (M_n 35,000-45,000Da)

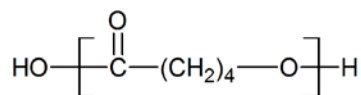
(Lot# 230620TMT-A)



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.

Polymer	M_n (from GPC)	M_w (from GPC)	PDI
Poly(valerolactone)	36,799	55,166	1.49

- Structure of Poly(δ -Valerolactone) copolymer**



Approved By:
Amie Tyler
Quality Manager