

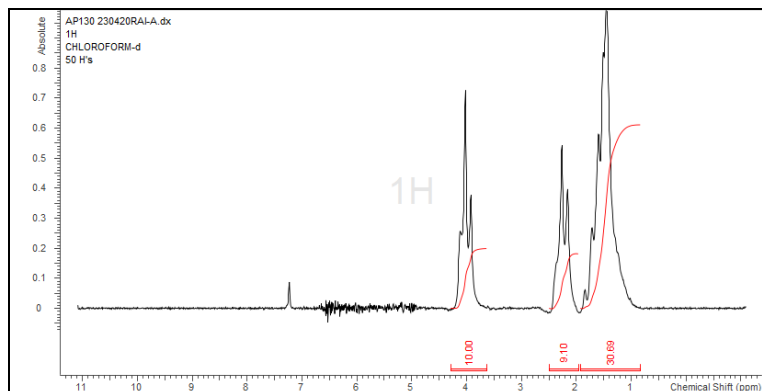
No. AP130

Certificate of Analysis

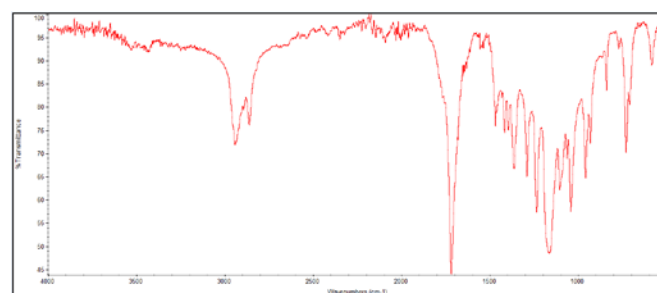


Product Name: Poly(caprolactone) copolymers acid endcap

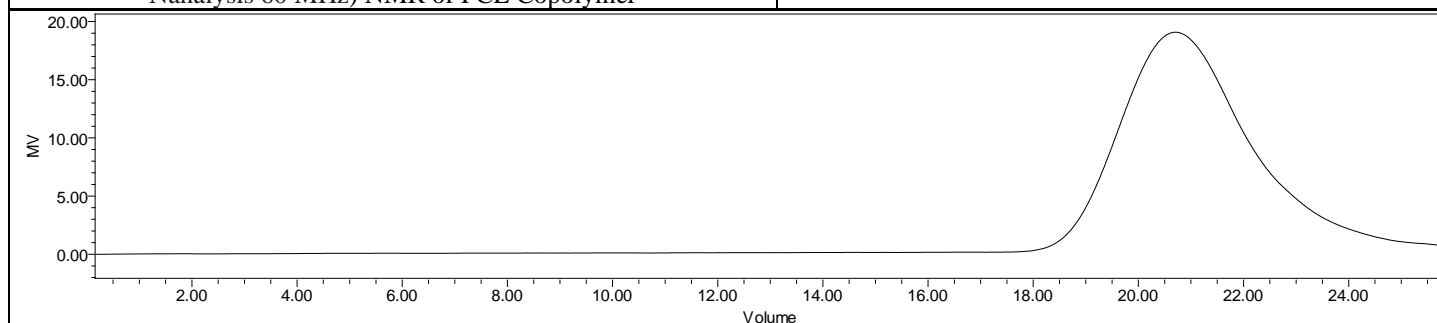
(Mn: 10,000-15,000 Da) (Lot#: 230420RAI-A)



H-NMR Spectrum of copolymers in CDCl₃ (NMRReady-60e, Nanalysis 60 MHz) NMR of PCL Copolymer



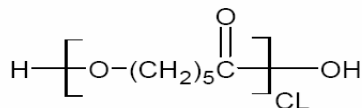
FTIR Analysis: Collected from IS5 ID7-ATR spectrometer (ThermoFisher) and analyzed in transmission mode.



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.

Polymer	M _n (from GPC)	M _w (from GPC)	PDI
PCL	10,866	17,143	1.58

- Structure of PCL copolymers



Approved By:
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Quality Manager