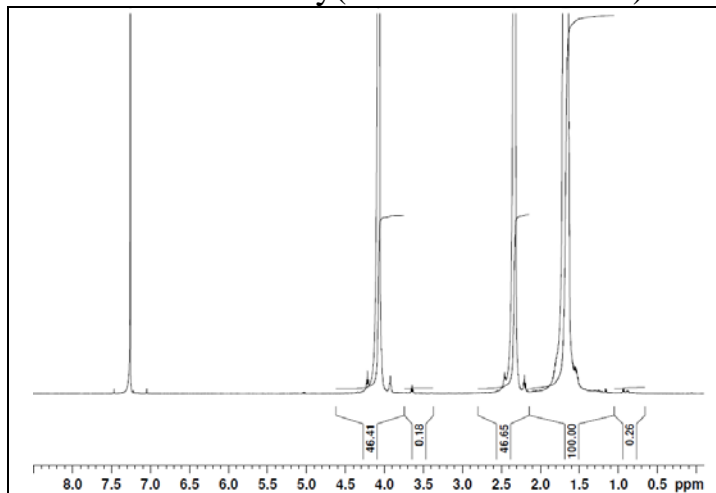
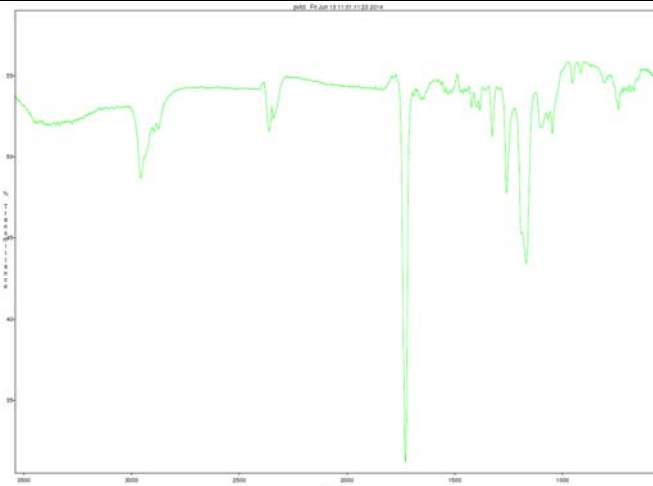


# No. AP115 Certificate of Analysis

Product Name: Poly( $\delta$ -valerolactone) acid endcap ( $M_n$  85,000-100,000Da) (Lot# 40605JSG)

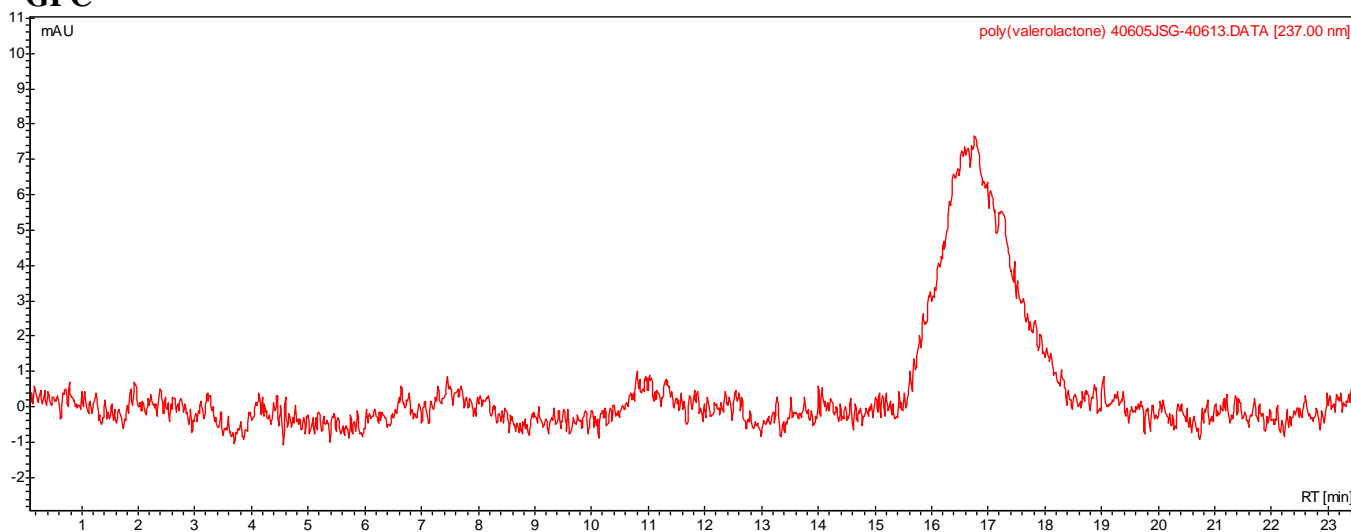


H-NMR Spectrum of polymer in  $CDCl_3$  (Varian Inova 500 MHz instrument) (HNMR purity 99.9%)



FTIR Analysis: Collected from cast-film on KBR salt-plate placed in Satellite FTIR (Thermo-Mattson) and analyzed in transmission mode.

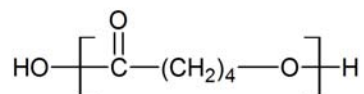
## GPC



Analysis Method: Varian Prostar system with 1 ml/min DCM flow across two Phenogel  $5\mu m$  columns and one Resipore column (Agilent). Detection via UV/Vis, calibrated against polystyrene standards.

Polymer	$M_n$ (GPC)	$M_w$ (GPC)	PDI
Poly(valerolactone)	85,970	110,020	1.28

- Structure



Material provided for research use only. Not for human usage.