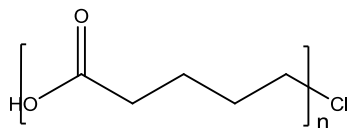


Sample Name: α -Carboxy- ω -Chloro-terminated Poly(δ -valerolactone)

Sample #: P20070-VL-COOHCl

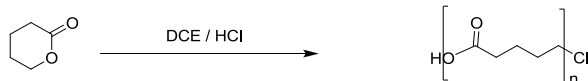


Composition:

$M_n \times 10^3$ HOOC-PVL-Cl	PDI
5.7 (NMR)	1.4 (SEC-LS)
5.0 (SEC)	

Synthetic Procedure:

HOOC-PVL-Cl is prepared by ring-opening polymerization of δ -valerolactone according to the scheme illustrated below:



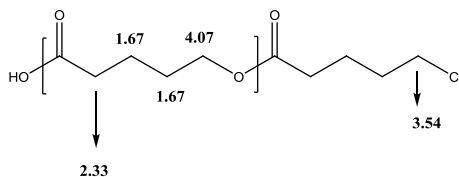
Solubility:

Poly(δ -valerolactone) is soluble in CHCl_3 , Acetone, THF, insoluble in methanol, ethanol, ether. Precipitated from Acetone or DCM into hexane or ether.

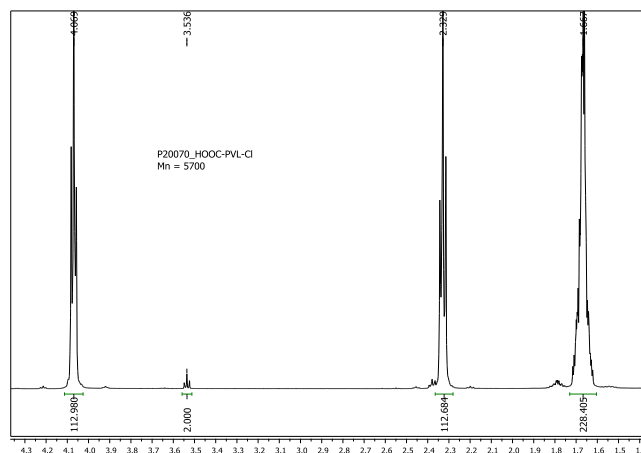
Characterization:

PVL, bearing carboxylic and chloroalkyl terminal units, was analyzed by size exclusion chromatography (SEC) to obtain the polydispersity index (PDI) and M_n . M_n was also determined by NMR.

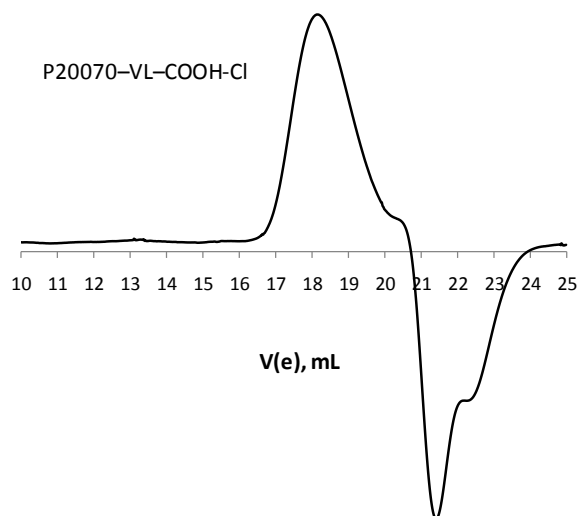
Chemical shifts assignments



H NMR of HOOC-PVL-Cl



SEC of the polymer:



N.B.: Certain broadening of the elugram might be due to the strong interaction of COOH-group with the column packing material