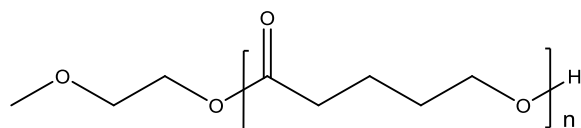
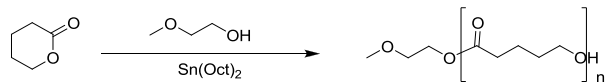


**Sample Name:** Poly( $\delta$ -valerolactone)**Sample #:** P20083-VLOCH3**Composition:**

$M_n \times 10^3$ PVLA	PDI
1.9 (NMR)	1.5 (SEC)

**Synthetic Procedure:**

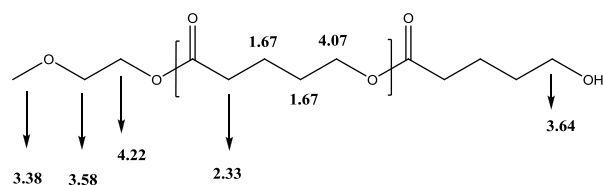
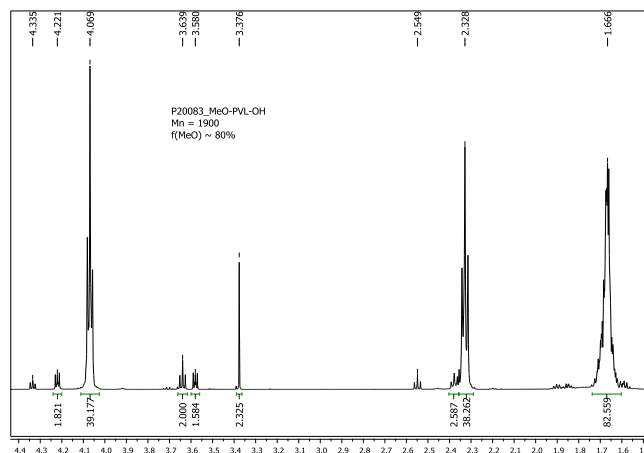
PVLA is prepared by ring-opening polymerization of  $\delta$ -valerolactone using methoxyethanol as an initiator. The scheme of the reaction is illustrated below:

**Solubility:**

Poly( $\delta$ -valerolactone) is soluble in  $\text{CHCl}_3$ , Acetone, THF, insoluble in methanol, ethanol, ether. Precipitated from Acetone or DCM into hexane or ether.

**Characterization:**

PVL was analyzed by size exclusion chromatography (SEC) to obtain the polydispersity index (PDI).  $M_n$  was determined by NMR from the integrals ratio of the peaks at 3.64 and 4.07 ppm.

**Chemical shifts assignments****NMR of PVLA****SEC of the polymer:**