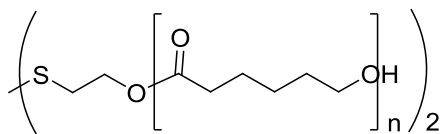


Sample Name: Poly(ϵ -caprolactone), bearing dithiodiethanol core

Sample #: P20057_CLdisulf

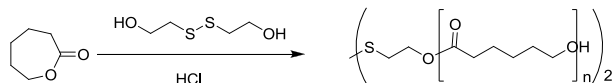
Structure:



Composition:

$M_n \times 10^3$ HO-PCL-SS-PCL-OH	PDI
6.4 (NMR)	1.2
SS functionality	$\geq 95\%$

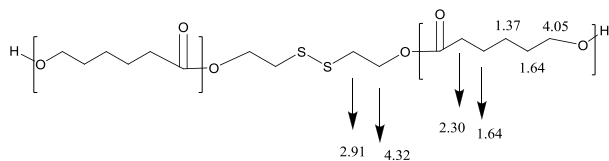
Synthetic Procedure: $(-S-PCL)_2$ is prepared by ring-opening polymerization of ϵ -caprolactone using disulfide-based initiator. The scheme of the reaction is illustrated below:



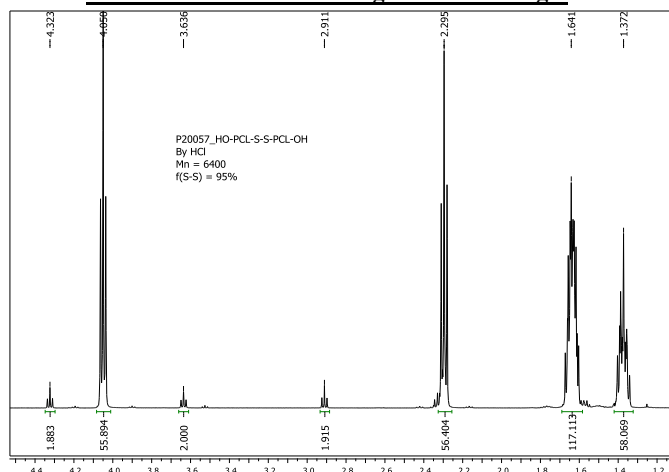
Characterization: PCL bearing the disulfide linkage was analyzed by size exclusion chromatography with light-scattering detector (SEC-LS) to obtain the M_n and polydispersity (PDI).

Solubility: Poly(ϵ -caprolactone) is soluble in $CHCl_3$, Acetone, THF, insoluble in methanol, ethanol. Precipitated from Acetone or $CHCl_3$ into hexane/EtOH or ether/EtOH.

Chemical shifts assignments



1H -NMR of the PCL bearing disulfide linkage:



SEC of PCL-SS-PCL:

