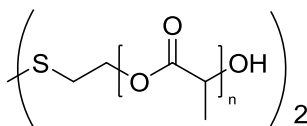


Sample Name: Poly(DL-lactide) bearing a disulfide linkage

Sample #: P20159SS-DLLA disulf

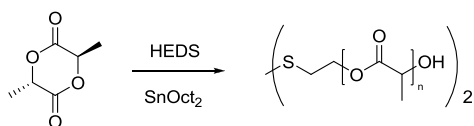


Composition:

$M_n \times 10^3$ HS-PDLLA	PDI
3.9 (NMR)	1.40
SS functionality $\geq 95\%$ (NMR)	

Synthetic Procedure:

PDLLA is prepared by ring-opening polymerization of DL-lactide by tin octoate using 2,2'-hydroxyethyl disulfide (HEDS) as an initiator. The scheme of the reaction is illustrated below:



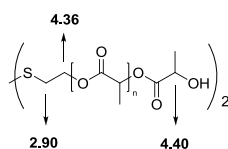
Solubility:

PDLLA is soluble in CHCl_3 , Acetone, THF, insoluble in ethanol, hexane. Precipitated from Acetone or CHCl_3 into EtOH or hexane/EtOH.

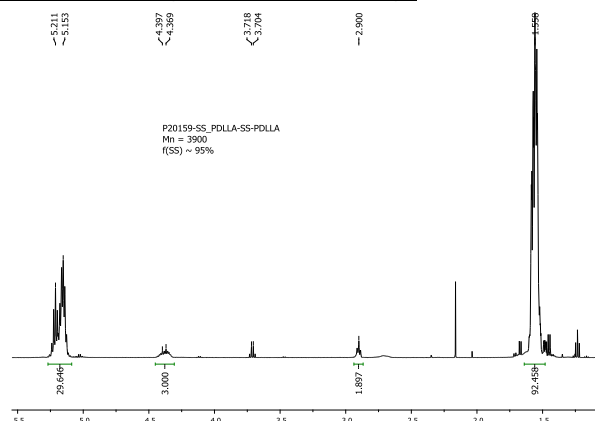
Characterization:

PDLLA bearing a disulfide linkage was analyzed by size exclusion chromatography (SEC) to obtain the polydispersity index (PDI). M_n was estimated by NMR. Percentage of thiol functionality was determined from the integrals ratio of the peaks at 4.40 and 2.90 ppm.

Chemical shifts assignments



PDLLA bearing a disulfide linkage



SEC of the polymer:

