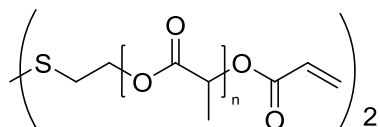


Sample Name: α , ω -di-Acryloyloxy-terminated Poly(DL-lactide) bearing disulfide linkage

Sample #: P20155SSA-DLLA-2Acr

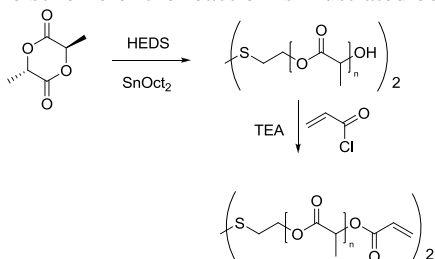


Composition:

$M_n \times 10^3$ PDLLA-2Acr	PDI
10.4 (NMR)	1.2
Acryloyl functionality $\geq 95\%$ SS functionality $\geq 95\%$ (NMR)	

Synthetic Procedure:

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



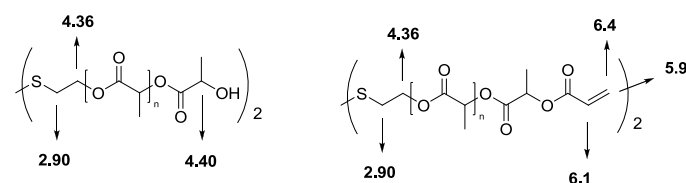
Solubility:

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

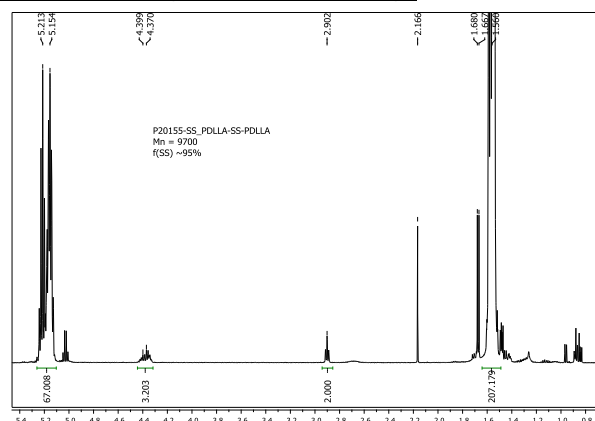
Characterization:

PDLLAs were analyzed by size exclusion chromatography (SEC) to obtain the polydispersity index (PDI). M_n was estimated by NMR. Percentage of vinyl functionality was determined from the integrals ratio of the peaks at 2.90 and 5.9, 6.1 and 6.4 ppm.

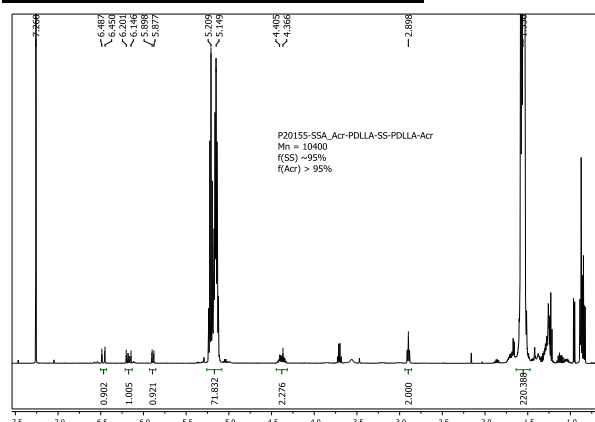
Chemical shifts assignments



PDLLA bearing a disulfide linkage



PDLLA bearing acryloyl moieties



SEC of the polymer:

