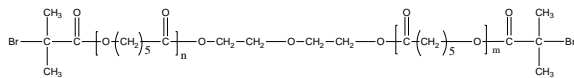


Sample Name: α , ω -Dibromo ended Poly(ϵ -caprolactone)

Sample #: P7122-CL2Br

Structure:

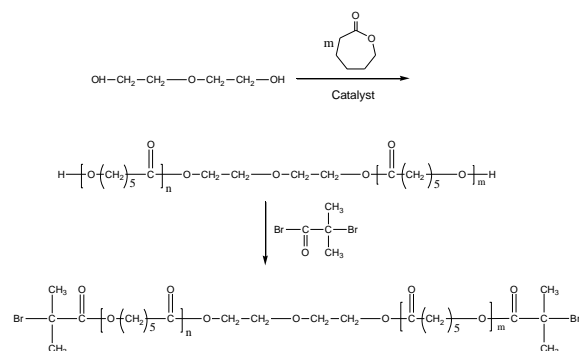


Composition:

$M_n \times 10^3$	PDI
1.1	1.2

Synthesis Procedure:

α - ω -dibromo functionalized Poly(ϵ -caprolactone) is prepared by ring opening polymerization of ϵ -caprolactone and coordinated reaction of bromoisobutyryl bromide. The scheme of the reaction is illustrated below:



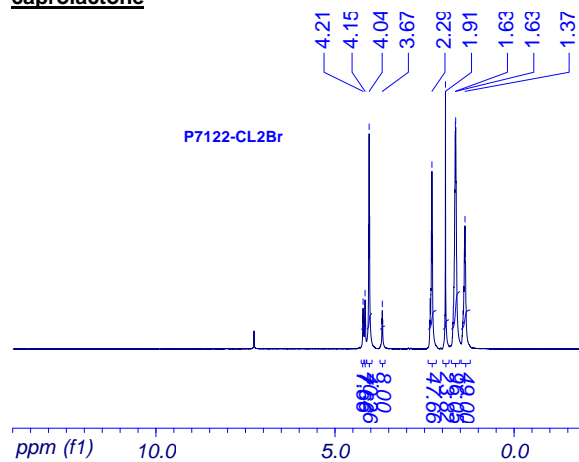
Characterization:

The molecular weight is calculated from NMR of poly(ϵ -caprolactone) by comparing the peak area of the diethylene glycol protons at about 3.6 ppm with the ϵ -caprolactone protons at about 4.1 ppm. The polydispersity index (PDI) is obtained by size exclusion chromatography using polystyrene calibrated columns.

Solubility:

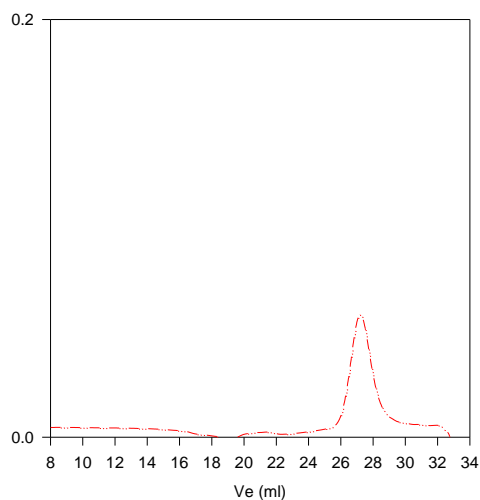
The polymer is soluble in toluene, THF, $CHCl_3$ and CH_2Cl_2 . The polymer is insoluble in methanol, hexane and ether.

NMR of Sample α - ω dibromo terminated Poly caprolactone



SEC of Sample of the product:

P7122- CL2Br



Size exclusion chromatography:

--- Dihydroxyl ended poly(caprolactone), $M_n=1100$, $M_w=1300$, $PI=1.2$