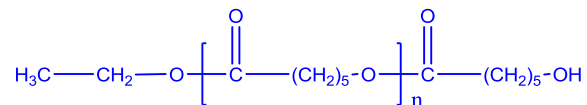


**Sample Name:** Poly( $\epsilon$ -caprolactone)

**Sample #:** P6796-CL

**Structure:**



**Composition:**

$M_n \times 10^3$	PDI
1.5	1.18

**Synthesis Procedure:**

The polymerization of  $\epsilon$ -caprolactone can be initiated with a variety of catalysts based on aluminum, tin, barium or HCl.

**Purification:**

When metal catalysts are employed, the residues are removed by repeated extraction with an aqueous EDTA solution ( $0.1 \text{ mol L}^{-1}$ ) followed by washing with water up to neutral pH. The non-polar solvent (usually toluene) is removed under reduced pressure and the polymer is precipitated in a large excess of hexane. The polymer is then freeze-dried after dissolution in benzene.

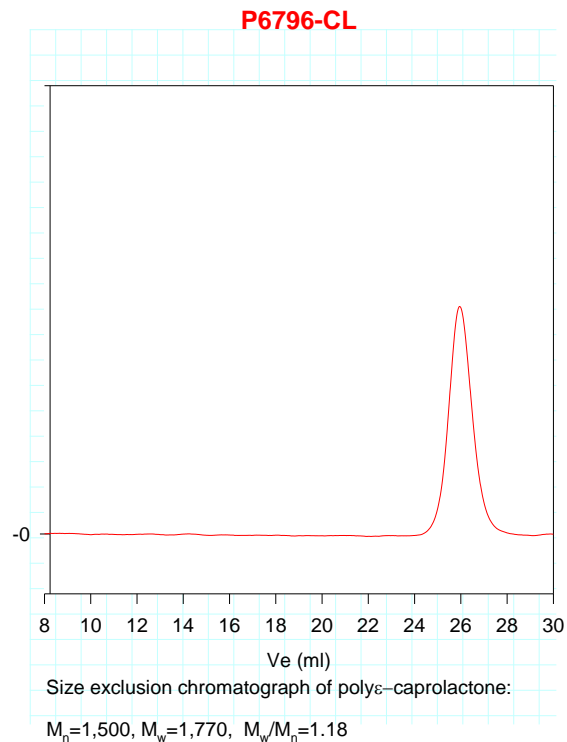
**Characterization:**

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography.

**Solubility:**

Poly( $\epsilon$ -caprolactone) is soluble in toluene, THF,  $\text{CHCl}_3$  and  $\text{CH}_2\text{Cl}_2$ . The polymer is insoluble in methanol, hexane and ether.

**SEC of Sample:**



**NMR of Sample:**

