

PROCESS FOR THE PREPARATION OF LIQUID TIN(II) ALKOXIDES**ABSTRACT**

This invention describes the synthetic process of producing liquid tin(II) alkoxides for use as either catalysts in the synthesis of lactide or as initiators in the polymerization of cyclic ester monomers to yield biodegradable polyesters. The synthetic process employs anhydrous tin(II) chloride dissolved in n-heptane and mixed with dry diethylamine. Alcohols, ROH, in which the R groups are *n*-C₄H₉, *n*-C₆H₁₃, and *n*-C₈H₁₇ are added to the reaction mixture and stirred for 12 hours. The reaction mixture is then filtered under nitrogen or argon before being evaporated to dryness to yield the three tin(II) alkoxides, namely: tin(II) *n*-butoxide, tin(II) *n*-hexoxide, and tin(II) *n*-octoxide. All three tin(II) alkoxides are viscous, dark yellow liquids which are highly soluble in most common organic solvents. Furthermore, they can all be stored under an inert atmosphere for long periods without any significant change in their reactivity and therefore in their effectiveness as catalysts/initiators.

Fig. 2