

A novel synthesis of N-alkyl and N,N-dialkyl-O-isopropyl thionocarbamates from isopropyl dioxanthogenate and primary and secondary amines have been developed on laboratory and applied on industrial scale production. Sodium hypochlorite have been used for oxidation of amine salt of isopropyl xanthogenic acid to diisopropyl xanthogenate until all reactant have been digested. According to satisfactory yield and purity of synthesized N-alkyl and N, N-dialkyl-O-isopropyl thionocarbamates obtained by laboratory optimal synthetic procedure a satisfactory industrial adaptation on industrial scale have been done. The proposed method offer a high degree of conversion and purity of product, absence of by-products and technological applicability at industrial scale. Considering importance of the xanthogenates, application of the optimized methods of thionocarbamates synthesis would provide significant improvement in sustainable development and implementation of eco-friendly production technology. This environmentally benign process represents a suitable option to existing methods.