

Abstract

In these recent years, there is a large application of dispersant additives using an alkyl group based on different oligomers. As additives, we generally use succinimides. A series of amido-esters as polyfunctional additives for lubricating oils have been synthesized in our laboratories. They enhance dispersive, detergency, antioxidant, anticorrosive, antiwear properties and thermal stability. The raw materials are an oligomer obtained by thermal cracking under vacuum of polyethylene waste from the petrochemical complex of Skikda (Algeria). The synthesised products have been identified by physical and chemical methods. They have undergone much exploitation tests. The results show that these compounds can be used as polyfunctional additives for engine oils at low and high temperature