



Synthesis and Characterization of Stoving Alkyd Resin Based on Oil Blend of Karawila Seed Oil and Coconut Oil

DKB Vitharana, JK Premachandra, ADUS Amarasinghe and MAB Prashantha

Abstract

An alkyd/melamine resin mixture is the usual composition for the preparation of coating called Baking enamel or Stoving enamel cured through functional groups of the resin. This research focused on novel modified stoving alkyd resins having improved properties such as Film hardness, Adhesion and Gloss which are synthesized using blends of coconut oil and karawila seed oil. The alkyd resins were synthesized using monoglyceride process. The desired pencil hardness of 8H was obtained with the 10% of karawila seed oil blended with coconut oil.