



Preparation of Zinc-Cobalt Driers from Melon and Sesame Seed Oils

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ABSTRACT

Oils from melon and sesame seeds were extracted and their physicochemical properties were evaluated as; iodine value, 126 mg I₂ g⁻¹ and 113 mg I₂ g⁻¹, saponification value, 197 mg KOH g⁻¹ and 189 mg KOH g⁻¹, acid value, 4.71 mg KOH g⁻¹ and 5.64 mg KOH g⁻¹, free fatty acid, 2.37 mg KOH g⁻¹ and 2.92 mg KOH g⁻¹, peroxide value, 1.76 mg kg⁻¹, and 1.98 mg kg⁻¹, specific gravity, 0.91 and 0.92 respectively. Melon and sesame seed oils were utilized in the preparation of metal soaps of zinc and cobalt. The physicochemical properties of the metallic soap were determined using standard procedures. A binder – drier solution was prepared using an alkyd resin and xylene and the metallic soaps were incorporated into the solution as driers. The reduction in the drying time with increase in the concentration of the metallic soaps indicated that the metallic soaps acted as catalysts in the coating.

Keywords: Paint driers, melon, sesame, physicochemical properties, seed oils.
