

WOOD FINISH FROM RUBBER SEED OIL ALKYD RESIN

Modified alkyd resin prepared from refined rubber seed oil has been used for formulating paint (Njoku and Ononogbu, 1995). The present study was aimed at developing an alternative use of these resins in the preparation of wood finish.

Table 1. Formulation of wood finish using modified rubber seed oil alkyd resin

Recipe	Quantity (g)
Alkyd resin	17.8
Solvent (white spirit)	7.0
Lead naphthenate	0.1
Cobalt naphthenate	0.1
Total	25.0

the medium one was difficult. The long alkyd wood finish also showed comparable drying times for both first and second coats respectively to those of commercial products, while the medium alkyd took slightly longer time. These results compared favourably with that of using dehydrated castor oil, obtained from another member of Euphorbiaceae family (Okoro and Nwosu, 1991). It was also observed that a 1:3 ratio of alkyd wood finish to thinning solvent could be used as in the case of other commercial wood finish for dilution before application. This new finding increases the potential use of rubber seed oil in alkyd resin industry.

Table 2. Characteristics of the wood finish tested on smooth and rough wood

Wood finish from modified oil	Degree of glossiness	Brushability	Drying time (min)	
			First coat	Second coat
Medium oil	Highly glossy	Fairly difficult	68	160
Long oil alkyd	Highly glossy	Easy	60	125
Commercial wood finish	Highly glossy	Easy	58	110

Rubber seed oil was refined and the alkyd resin modified as described earlier (Njoku and Ononogbu, 1995). Wood finish was formulated using the medium and long alkyd resins (Okoro and Nwosu, 1991). The modified alkyd resin was used in the preparation of wood finish (Table 1). The wood finish developed was evaluated for glossiness, brushability and drying characteristics.

The results of the evaluation (Table 2) indicate that the wood finish developed from both the long and medium alkyds compared well with commercial wood finish in the degree of glossiness. While the long alkyd wood finish was easily brushable,

REFERENCES

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