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A NOTE ON WATER ABSORPTION BY DEHYDRATED CASTOR OIL MODIFIED ALKYD RESINS

by

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SUMMARY

Dehydrated castor oil modified alkyds show greater resistance to discolouration and their films have more flexibility as compared to linseed oil modified alkyds. The addition of small proportion of DCO to alkyd has a useful effect both in promoting polymerization and in assisting alcoholysis. It has been reported that D.C.O. modified alkyd resin films show more whitening when immersed in water than linseed oil modified alkyd resin films. The reliability of this test as a measure of water resistance has been questioned. Water absorbed rather than the degree of whitening should give a correct idea of the water resistance of modified alkyd resin films. This has been determined. Two sets of alkyd resins at three levels of oil modification were prepared. The first set was modified by linseed oil only while in the other 20% linseed oil was substituted by D.C.O. Varnishes were prepared from the resins, applied on weighed panels and allowed to dry. The water absorbed when the panels immersed in water was quantitatively determined at different interval of time upto 48 hours. It was found that the resistance to water uptake is greater with D.C.O. modified film.

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