

Full Paper

Fatty Acid Composition of Tobacco Seed Oil and Synthesis of Alkyd Resin

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摘要 The fatty acid composition of tobacco seed oil revealed that the oil is rich in unsaturated fatty acids, having linoleic acid (71.63%), oleic acid (13.46%) and palmitic acid (8.72%) as the most abundant unsaturated and saturated fatty acids respectively. So the tobacco oil was characterized as semi-drying type on the basis of fatty acid composition. The synthesis of alkyd resin was carried out by alcoholysis or monoglyceride process using an alkali refined tobacco seed oil, pentaerythritol, *cis*-1,2,3,6-tetrahydrophthalic anhydride along with lithium hydroxide as catalyst. The alkyd resin so prepared was found to be bright and of low color with high gloss. The drying and hardness properties and adhesion of the tobacco seed oil derived alkyd resin were also found a bit superior to those of other alkyd resins of the same oil length. In addition, the water and acid resistance of the said alkyd was also found comparable to the other alkyds.

关键词 [tobacco oil](#) [alkyd](#) [fatty acid](#) [linoleic acid](#) [gloss and adhesion](#)

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Key words [tobacco oil](#) [alkyd](#) [fatty acid](#) [linoleic acid](#) [gloss and adhesion](#)

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