

Alkyd Resins Manufacturing, Formulation and Processing

Description:

Alkyd resins are poly-esterification products derived from organic acids and alcohols. The majority of the alkyd used commercially have, as part of their acids component, long-chain fatty acids typically derived from vegetable oils. When alkyd are produced without fatty acids modification, they are referred to as polyesters or oil-free alkyds.

One of the important attributes of alkyd resins is their good compatibility with many other coating polymers. Alkyd resins are important ingredients in many synthetic paints, varnishes and enamels and find also applications as thermosetting plastics that can be molded. The principal applications are furniture and architectural coatings, product finishes, special-purpose coatings and automotive refinishing primers. Alkyd resins are manufactured from the condensation reaction between oil or polyols, acids, and alcohol. They are typically used as binders for coatings and printing inks.

More economical alkyd resins are produced from the alcoholysis or glyceride process where end product quality control is not as paramount. In this process raw vegetable oil, high in unsaturated component, is combined with additional polyol and heated to cause Trans esterification of the triglycerides into a mixture of mono- and diglyceride oils. To this resulting mixture acid anhydride is added to build molecular weight of the resin into roughly the same product as in the fatty acid process.

Alkyd resin, which is used in the production of a wide variety of paints, is supplied to the Indian market both from domestic production and import. As Indian industries are producing paint of amount approximately Rs.15000 crores which needs Alkyd Resin of amount near about Rs. 3000 crores. Due to construction of apartments, buildings, roads there is huge demand of paint in this sector. Increased demand of paint will need the basic raw material of paint i.e. alkyd resin simultaneously.

For more details download PDF file.

Keywords: Alkyd coating formulations, Alkyd Formulations by Resins, Alkyd resin, Alkyd resin Based Profitable Projects, Alkyd resin Based Small Scale Industries Projects, Alkyd resin chemistry, Alkyd resin Making Small Business Manufacturing, Alkyd resin manufacturing plant, Alkyd resin manufacturing process, Alkyd Resin Plants, Alkyd resin Processing Projects, Alkyd resin production Business, Alkyd Resin Production Plant, Alkyd resin production process, Alkyd resin properties, Alkyd resin reaction, Alkyd

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