Modern Technology of Paints, Varnishes & Lacquers (2nd Edition)

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Surface coating industry is one of the most popular industries. Paints, varnishes and lacquers industry is gaining ground at a rapid pace in modern time accompanied with closed advance in surface coating technology. They are formulated for specific purposes: outside house paints and exterior varnishes are intended to give good service when exposed to weathering; interior wall paints are formulated to give excellent coverage and good wash ability; and lacquers are formulated for rapid drying. Varnish is one of the important parts of surface coating industry. Varnish is a transparent, hard, protective finish or film primarily used in wood finishing but also for other materials. They are used to change the surface gloss, making the surface more matte or higher gloss, or to provide the various areas of a painting with a more unified finish. Varnishes are also applied over wood stains as a final step to achieve a film for gloss and protection. Some products are marketed as a combined stain and varnish. Paint is any liquid, liquefiable, or mastic composition which after application to a substrate in a thin layer is converted to an opaque solid film. It is most commonly used to protect, colour or provide texture to objects. The paint industry volume in India has been growing at 15% per annum for quite some years now. As far as the future growth prospects are concerned, the industry is expected to grow at 12 to 13% annually over the next five years. The technology is required to produce different type of new paints and varnishes based on different type of uses. The paint and coatings industry plays an integral role in sustainability; coatings protect the objects we depend on every day, preserve our possessions, so they last longer and provide for a sustainable future. They are indispensable products that extend the useful life of everyday objects by acting as a protective barrier. These newer products have enabled paint manufacturers to improve the performance properties of their paints and coatings and so satisfy the more stringent requirements of our modern industrial society. The future for industrial paints, varnishes and lacquers is bright. In the next few years its value will go up gradually in line with the global trend.

The major contents of the book are application of paints, fundamentals of paint, varnishes and lacquers, manufacturing of different type of paints, paint formulation, pigment dispersion, emulsion paints, and so on.

The book deals with fundamentals of paints, Varnishes and lacquers, pigments, Oils used in paints and varnishes, solvents, dryers, plasticizers, additives for surface coating, various types of paint manufacturing etc. The book is very useful for new entrepreneurs, existing units, technocrats, technical institutions and for those who wants to diversify in the field of paints manufacturing.

1. Application of Paints
Paint System Specification
Preparation of Paints
Establishment of the paint Manufacture Unit
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White Pigments
Black Pigments
Red Pigment
Green Pigment
Blue Pigment
Synthetic Ultramarine Blue
Yellow Pigment
Drying Oils & Driers
Drying Oils
Linsed Oil
Castro Oil & Dehydrated Castro Oil
Dehydrated Castro Oil (DCO)
Tung Oil
Soyabean Oil
Cashew Nut Shell Liquid (CNSL)
Other Less Important Oils
Refiningof Drying Oils
Diriers
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Lacquers
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Red Pigments
Yellow and Brown Earth Colours
Orange and Yellow Pigments
Green Pigments
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Extenders
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Spirit Varnish or Lacquer

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Plastic Paints
Floor Paints
Flat Paints
Aluminium Paint
Wrinkle Finishes
Hammer Fnishes
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Hull Paints
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Anti-Corrosive Paints
Road Marking Paints
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Molybdate Orange
Cadmium Orange
"Mercadium" Orange
Benzidine Orange
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Organic Green Toners
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Copper Phthalocyanine blues
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Drum Type Mixer
Planetary Paste Mixer
Portable Stirrer
High Speed Dissolver
Steam Jacket Pans and Kettles
Emulsifiers
Filter Press
Unroll Mill

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