

# **Manufacturing of Printing Inks with Formulation**

**(Flexographic Inks, Typographic Printing Inks,  
Planographic Inks, Intaglio Printing Inks,  
Gravure Printing Inks, Special Inks, Offset  
Printing Inks, Ball Pen Inks, Fluorescent Inks,  
Phosphorescent Pigments, Silk-screen  
Fluorescent Printing, Inorganic Pigments)**

# Introduction

Printing inks are widely used in publishing and packaging industry. The publishing industry consists of commercial printing and other printing products such as newspapers, magazines, periodicals, etc. This is also used on many different surfaces ranging from aluminium cans and plastic bottles through to paper. Special inks have been developed for use in these different situations. Although the newest of the major print processes, flexography (or flexo) is now the most important process for the production of flexible packaging. A number of other applications include corrugated cases, tickets, forms, directories, paperback books and comics.

**Ink is a liquid or paste that contains pigments or dyes and is used to colour a surface to produce an image, text, or design. Ink is used for drawing or writing with a pen, brush, or quill. Thicker inks, in paste form, are used extensively in letterpress and lithographic printing. Ink can be a complex medium, composed of solvents, pigments, dyes, resins, lubricants, solubilizers, surfactants, particulate matter, fluorescents, and other materials. The components of inks serve many purposes; the ink's carrier, colorants, and other additives affect the flow and thickness of the ink and its appearance when dry.**

**Printing ink sector in India witnessed a growth of around 7.5% per annum during the Past years. Printed packaging accounts for around 27% of the demand for printing inks in India followed by newspapers at 20%. Commercial printing/promotional and printed advertising together account for around 19% of the demand. Other key end user segments for printing inks include books and stationery. With the print sector forecast to grow at around 8% per annum, in coming years, printing ink segment is expected to grow strongly.**

**India is among the fast growing printing ink markets globally spurred by the rapid expansion of the domestic print markets. Backed by a strong demand from key end user segments such as package printing, newsprint, publishing and other commercial printing, the printing ink market in India has registered strong growth over the years. The printing ink industry is fragmented with hundreds of manufacturers and a large number of players in the unorganised sector.**

**The global printing ink market can be categorized on the basis of types of processes, products, applications and geography. On the basis of various printing processes, the global printing ink market can be segmented into gravure printing, lithographic printing, flexographic printing, digital printing and letterpress printing and others.**

**The growing demand from the packaging industry is expected to boost the growth of the global printing inks market. Rising demand for UV-cured inks from various printing processes is also expected to fuel market growth.**

**On the basis of product type, the global printing inks market has been divided into oil-based, water-based, solvent-based, and other printing inks.**

**The global market for Printing Inks is projected to reach US\$20.4 billion by 2022, driven by growing opportunities in the packaging print sector supported by steady growth in consumer retail sales and the ensuing importance of printed materials in packaging, labelling, and advertising.**

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**Diacetone Alcohol Or Dical**

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**Drying Times**

**Length of Ink**

**Printed Appearance**

**Machine Performance**

**Fading**

**Special Requirements**

## **31. The Intaglio Process**

**Copper Plate Engraving**

**Mezzotinting**

**Principles of Photogravure**

**Preparing the Photogravure Copper Sleeve**

**Rotogravure Machines**  
**Offset Gravure**  
**Die Stamping**  
**Hand Die-stamping Machines**  
**Counter-sunk Dies**  
**Power Press Die Stamping**  
**Intaglio Inks**  
**Types of Media for Copper-plate Inks**  
**Principles and Characteristics of Steel-plate**  
**Photogravure Inks**  
**Rotary Photogravure (Rotogravure)**  
**Rotogravure Ink Characteristics**  
**Simple Examples of Gravure Inks**  
**Synthetic Resins for Gravure**  
**Gravure Printing on Foil and Plastic Sheeting**  
**Special Gravure Inks**  
**Howard's Gravure Formulations**

**Die-stamping Inks**  
**Characteristics of Die-stamping Inks**  
**Die-stamping Media**  
**Letterpress Imitation Die-stamping**  
**Gravure Ink Worries and Cures**  
**Hard and Porous Prints**  
**Pearling**  
**Poor Highlights**  
**Poor Neutral Greys**  
**Static Electricity in the Paper**  
**Sticking When Re-reeling the Wed**  
**Weak or Patchy Reproduction**

## **32. The Lithographic Process**

**Branches of Lithographic Reproduction**  
**Senefelder's Lithographic Stone**  
**Modern Lithographic Plates**

**Photolithography**  
**Bimetallic Plates**  
**Trimetallic Plates**  
**Offset Lithography**  
**Pantone Dry Lithography**  
**Collotype Direct Lithography**  
**Direct Lithographic and Offset Machines**  
**Principle of Offset Rotary Machines**  
**Xerographic Printing**  
**The Lithographic Process**  
**The Importance of Correct Ink-water Balance**  
**Offset Ink Formulation**  
**Conventional Direct Litho and Offset Inks**  
**Defective Offset Media**  
**Anomalous Lithographic Drying**  
**Dry-offset Inks**  
**Bronze Preparations**

**Tin Printing Offset Inks**  
**Lithographic Ink Worries and Cures**  
**Drying Too Fast**  
**Embossing the Blanket**  
**Fluffing**  
**Greasing**  
**Image Detail Disappears**  
**Image Thickens**  
**Ink Retreating from Fountain Roller**  
**Piling**  
**Rollers Stripping**  
**Scumming**  
**Spotty Ink Drying**  
**Tinting**  
**Worries Due to Using Etch**

**33. Directory Section**

Printing Inks with Formulae, Printing Inks with Processes, A Guide to Popular Printing Techniques, best small and cottage scale industries, formulations of printing inks, Gravure Printing industry, Growth in the Printing inks, How Ink Is Made, How Ink is manufactured, How printing ink manufactured in factory, how to manufacture ink, How to Start a Printing inks Production Business, How to start a successful Printing inks business, How to Start Printing inks Industry in India, Ink and Printability Testing, Inking Rollers, Inking Rollers uses, Manufacture of Inks and varnishes, manufacturing of varnish, Modern Printing Process, Most Profitable Printing inks manufacturing Business Ideas, new small scale ideas in inks manufacturing industry, Newspaper Printing Ink, Packaging Inks Market - Covering the Printing Inks, Coatings and Allied Industries, Printing inks Based Small Scale Industries Projects, Printing inks Business, Printing inks manufacturing Industry in India, Printing inks, manufacturing Projects, printing ink formulation, printing ink manual, Printing Ink Manufacturing, printing ink manufacturing process, Printing Ink Technology and Manufacture, Printing Inks & Applications, Printing Processes and Printing Inks, Printing processes: Offset, Flexo, Digital, Gravure, Profitable Small Scale inks Manufacturing, Robust Growth in the Indian Exports of Printing Inks, screen printing process, Setting up and opening your Printing inks Business, Setting up and opening your Printing Business,

Setting up of Printing inks manufacturing Units, Small scale Commercial Printing inks production, Small Scale Printing inks manufacturing Projects, Small Start-up Business Project, Start up India, Stand up India, Starting a Printing inks manufacturing Business, Starting a Printing Business, Starting an Ink and Toner Cartridge Refilling Business, Starting an Offset Printing Press, Start-up Business Plan for Printing inks, startup ideas, Startup Project, Startup Project for Printing inks Business, startup project plan, Technology of Printing Inks: Raw materials and formulations, The manufacturing process of a news ink, varnish making process, Varnish manufacturing, varnish manufacturing process, Web Offset Machines, What Equipment Do I Need to Start a Printing Business?, Printing ink manufacturing process, Business guidance for printing inks manufacturing, Technology Book on Printing Inks, Printing Ink Manual, Technology of Printing Inks, printing inks modern technology, Lithographic Process, Flexographic Inks, Typographic Printing Inks, Planographic Inks, Intaglio Printing Inks, Gravure Printing Inks, Special Inks, offset printing ink manufacturing process, formulation of Offset Printing Inks, Ball Pen Inks, Fluorescent Inks, Phosphorescent Pigments, Silk-screen Fluorescent Printing, Inorganic Pigments, Offset printing technology, How printing ink manufactured in factory, offset printing ink formulation



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## Contact us

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# ***Niir PROJECT CONSULTANCY SERVICES***

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An ISO 9001:2008 Company



# Who are we?

- *One of the leading reliable names in industrial world for providing the most comprehensive technical consulting services*
- *We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients' in India & abroad*

*We at NPCS want to grow with you by providing solutions scale to suit your new operations and help you reduce risk and give a high return on application investments. We have successfully achieved top-notch quality standards with a high level of customer appreciation resulting in long lasting relation and large amount of referral work through technological breakthrough and innovative concepts. A large number of our Indian, Overseas and NRI Clients have appreciated our expertise for excellence which speaks volumes about our commitment and dedication to every client's success.*



*We bring deep, functional expertise, but are known for our holistic perspective: we capture value across boundaries and between the silos of any organization. We have proven a multiplier effect from optimizing the sum of the parts, not just the individual pieces. We actively encourage a culture of innovation, which facilitates the development of new technologies and ensures a high quality product.*

# What do we offer?

- *Project Identification*
- *Detailed Project Reports/Pre-feasibility Reports*
- *Business Plan*
- *Industry Trends*
- *Market Research Reports*
- *Technology Books and Directory*
- *Databases on CD-ROM*
- *Laboratory Testing Services*
- *Turnkey Project Consultancy/Solutions*
- *Entrepreneur India (An Industrial Monthly Journal)*

# How are we different ?

- *We have two decades long experience in project consultancy and market research field*
- *We empower our customers with the prerequisite know-how to take sound business decisions*
- *We help catalyze business growth by providing distinctive and profound market analysis*
- *We serve a wide array of customers , from individual entrepreneurs to Corporations and Foreign Investors*
- *We use authentic & reliable sources to ensure business precision*

# Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation

# Who do we serve?

- *Public-sector Companies*
- *Corporates*
- *Government Undertakings*
- *Individual Entrepreneurs*
- *NRI's*
- *Foreign Investors*
- *Non-profit Organizations, NBFC's*
- *Educational Institutions*
- *Embassies & Consulates*
- *Consultancies*
- *Industry / trade associations*

# Sectors We Cover

- *Ayurvedic And Herbal Medicines, Herbal Cosmetics*
- *Alcoholic And Non Alcoholic Beverages, Drinks*
- *Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin*
- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*



- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
- *Cereal Processing*
- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*

- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha  
(Biofuel)*
- *Hotel & Hospitality Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

## Sectors We Cover *Cont...*

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*

- *Potato And Potato Based Projects*
- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

- *Township & Residential Complex*
- *Textiles And Readymade Garments*
- *Waste Management & Recycling*
- *Wood & Wood Products*
- *Water Industry(Packaged Drinking Water & Mineral Water)*
- *Wire & Cable*

# Contact us

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