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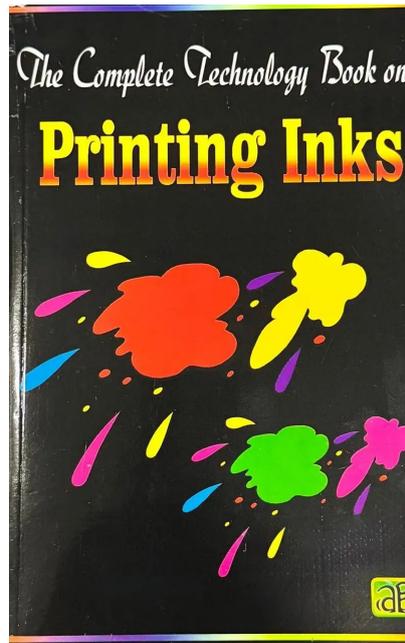
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The Complete Technology Book on Printing Inks

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Description

The beginning of ink making is something of a mystery. It is certain however, that the development of the art of writing preceded the invention of ink by almost a thousand

years. Today inks are divided into two classes: printing inks and writing inks. Printing is a process for reproducing text and images, typically with ink on paper using a printing press. It is often carried out as a large scale industrial process, and is an essential part of publishing and transaction printing. Different techniques and printing equipments are employed for each printing practices. The demand for innovative printing practices has been on a high in recent times. There are various kinds of printing processes; lithographic process, the gravure process, offset printing process etc. different types of inks derived from different processes are ball pen inks, bleachable inks, fluorescent inks, fast drying ink, automatic press inks, rotary press inks, coated paper inks, planographic inks, lithographic inks, offset tin printing inks etc. The Printing Ink industries have grown significantly during the last decade and this industry is characterized by exceeding high margin profit. As we read newspapers, magazines, and books on a daily basis therefore inks are found in almost every aspect of human activity. The worldwide printing inks market is projected to register a CAGR of about 2.8%. Printing inks market embodies the strength of the global as well as regional economies. With its high correlation to a national GDP, the printing inks market is cyclical in nature, with economic ups and downs amplifying the demand patterns. The world printing inks market is projected to grow moderately over the next couple of years.

The major contents of the book are pigment in the printing inks, manufacturing of printing inks, storage and testing of raw materials, planographic inks, lithographic inks, factors effecting visual appearance of ink film, factors effecting visual appearance of ink film, method of mixing metallic powder and varnish, the principle of reproducing photographs by printing methods, etc.

In this book an attempt has been made to bring together the useful manner as possible the fundamental Principles of ink making. The book contains formulae processes and other relevant information of the manufacturing of different types of printing inks.

Content

1. Introduction

2. Printing Inks

3. Printing Ink Vehicles

Vegetable Drying Oils

Linseed Oil and Linseed Oil Varnishes

Lithographic Varnish

China Wood Oil or Tung Oil

Soya Bean Oil

Perilla Oil

Other Vegetable Drying Oils
The Vegetable Semi-Drying Oils
Cottonseed Oil
Rapeseed Oil
The Vegetable Non-Drying Oils
Mineral Oils
Animal Oils
Terrestrial Animal Oils
Marine Animal Oils
Rosin Oils
Pitch Varnishes
4. Pigment in the Printing Inks
Pigments
Nature
Minerals
Carbonic sources
Botanical
From animals
Black Pigments
Lamp black
Russian black
Coal or gas
Wooden coal
Ivory coal
Bones
Parish black
Lead and graphite
Composition black
White Pigment
White lead
Antimony
Chinese white
Transparent white
Blainfix white
Yellow Pigments
Chrome yellow
Cadmium yellow
Ochres yellow
Gummy material
Minerals
Red Pigment

Vermillion
Carmine
Lac
Lake pigment
Kothenial lake
Madar
Blue Pigment
Prusian blue
Ultramarine blue
Reflex blue
Oriental blue
Cobalt blue
Indigo blue
Green Pigment
Emerald green
Chrome green

5. Manufacturing of Printing Inks

Storage and Testing of Raw Materials

Mixing operation

Mixing machines

Milling process

Delivery part of the machine

Quality control

Packing and selling

6. Typographic Printing Inks

Job Press Inks

Job Black

Job Press Bright Red

Job Press Green

Automatic Press Inks

Automatic Press Black

Automatic Press Red

Flatbed Cylinder Press Inks

Cylinder Press Black

Cylinder Press Peacock Blue

Rotary Press Inks

Rotary Press Red

Rotary Press Black

Web Press Inks

Web Press News Black

Perfecting Press Red

The Relation of Ink to Stock
Bond and Ledger Paper Inks
Bond Bronze Blue
Bond Black
Coated Paper Inks
Coated Paper Red
Coated Paper Yellow Lake
Super-calendered Paper Inks
Super Paper Red
Super Paper Blue
Parchment Paper Inks
Parchment Black
Parchment Red
Carton Stock Inks
Carton Yellow
Carton Red
Inks for Machine Finished Paper
Machine Finished Red
Machine Finished Blue
Glassine and Cellophane Inks
Glassine Violet
Glassine Green
Halftone Black Inks
High Grade Halftone Black
Publication Halftone Black
Process Inks
Process Transparent Yellow
Process Blue
Process Red
7. Planographic Inks
Lithographic Inks
High Grade Lithographic Black
Lithographic Peacock Blue Ink
Lithographic True Blue
Offset Printing Inks
Offset Red for Lake C
Offset Milori Blue
Offset Tin Printing Inks
Tin Printing Reddish Blue
Tin Printing Medium Yellow
Dry Offset Printing Inks

Dry Offset Red for Lake C
Dry Offset Bronze Blue
Photogelatin Inks
Photogelatin Blue
Photogelatin Black
8. Intaglio Printing Inks
Copper Plate Engraving Inks
Copper Plate Black
Copper Plate Blue
Steel Plate Engraving Inks
Steel Plate Black
Toner Blue Ink for Plate Black
Steel Plate Orange
Stamping Inks
Gloss Stamping Red
Dull Stamping Black
Photogravure Inks
Photogravure Picture Black
Photogravure Brown
Rotary Photogravure Inks
Plateless Engraving or Thermographic Inks
Dense Black for Plateless Engraving
True Blue for Plateless Engraving
9. Printing Inks and Colour
Subtractive Theory of Colours
Additive Theory of Colours
Reproduction of Colour By Printing Ink
Classification of Colours
Primary colours
Secondary colours
Tertiary colours
Examples of tertiary colours
Factors effecting visual appearance of ink film
Influence of colours
Cold colours
Warm colours
Terminology Related to Colour
Contrast
Harmony
Hue
Tint

Shade
Tone
Analogous colours
Complementary colours
Density in colour
Transparent and opaque colours
10. Qualities of Offset Inks
Working Qualities
Optical Qualities
Effects After Printing
11. Gravure Printing Inks
Characteristics of Gravure Inks
Vehicles in the Gravure Inks
Considerations for Purchasing Inks
12. Printing Inks for Letterpress
News ink
Inks for platen and cylinder machines
Moisture-set inks
Important Points
Quick-set inks
Cheque inks
Heat-set inks
Important Points
Metallic inks
Method of mixing metallic powder and varnish
Precautions
Aniline inks
Neo-set Inks
13. The Nature of Printing Ink
The Three Main Printing Systems
Typographic Method
Lithographic Method
Intaglio Method
General Properties of Letterpress Inks
The Silk Screen Method
The Principle of Offset Printing
Methods of Ink Drying
Relation between the Printing Process, Ink, And Paper
The Principle of Reproducing Photographs by Printing Methods
The Actinic Tanning of Gelatine
Letterpress Half-tone Plate Reproduction

The Principle of Photogravure
Half-tone Printing Using Dots Letter Press (or Litho)
Photogravure Printing Using Square Cells
Print Recognition
Differences in Litho and Offset-Litho Printing
Differences in Typographic Printing
14. The Colloidal Nature and Rheology of
Printing Inks
Ink Compared to Colloidal Dispersions
Flocculation
Types of Flow
Fluidity
Newtonian Flow
Plasticity
Plastic Flow
Consistency
Thixotropy
Measurement of Thixotropy
Pseudo-plastic Flow
Dilatant Flow
The Empirical Flow Test
Rheological Specifications of An Ink
Flow Requirements of Letterpress Inks
Supply of Ink from the Duct
Behaviour of Ink in the Duct
Distribution of Ink on the Press
Impression
Special Flow Requirements of News Inks
Flow Requirements of Offset Inks
Flow Requirements of Copper-plate Inks
Ink Tack
Nature of Tack
Measurement of Ink Tack
Elasticity and Plastic Flow
Elasticity
Relaxation Time
Fundamental Rheological Properties
15. Inorganic Pigments and Extenders
Nature of Pigments
The Oil Adsorption of Pigments
Opaque White Pigments

Transparent White Pigments And Extenders
Barytes And Blanc Fixe
Alumina Hydrate
Gloss White
Whiting or Chalk, CaCO_3
Mica
Silica, SiO_2
Magnesium Carbonate
The Use of Extenders In Printing Inks
Ultramarine
Bronze Blue, Iron Blue, Or Ferrocyanide Blue
Lead Chromes
Orange Basic Chrome
Chrome Red
Molybdate Orange and Molybdate Scarlet Chrome
Zinc Chrome on Zinc Yellow
Cadmium Pigments
Red Lead, Pb_3O_4
Vermilion, HgS
Brunswick Green And Miliori Green
Zinc Chrome Greens
Guignet's Green, Chrome Oxide Green
Natural Iron Oxide Pigments
Manufactured Iron Oxide Pigments
Uses of Inorganic Pigments in Printing Inks
16. Ink in Relation to Paper
The Nature of Paper
The Fundamentals of Paper Making
Conversion of Raw Materials to 'Half Stuff'
Rag Half Stuff
Esparto Half Stuff
The Treatment of Wood
Sulphite Method For Chemical Wood
Caustic Soda Method For Chemical Wood
Soda Sulphate Method For Chemical Wood
Mechanical Wood Treatment
Beating
Hand-made Paper
Machine-made Paper
Methods of Glazing Paper
Special Finishes

Opacity Improvements
Watermarking
Wove, Laid, and Twin-wire Paper
Storage of Printing Papers
Paper Troubles And Remedies
Fading of Tinted Printings
Fluffing or Dusting
Picking or Plucking
Static Electricity In The Stock
Types of Printing Paper
The Penetration of Ink Into Paper
Measurement of The Penetration of Ink into Paper
The Penetration of Slow-drying Inks Into Paper
Drying by Absorption
The Transfer of Letterpress Inks from Forme to Paper
Complete Contact of Paper Surface with Ink Film
Maximum Ink Acceptance Capacity of the Paper
Excess Ink on the Forme
General Requirements of Printing Paper
Printability of Offset Paper
General Requirements of Printing Ink in Relation to Stock
17 The Typographic Process
Stereotypes
Half-tone Engravings in zinc and Copper
Line Blocks
Printing Machines
The Hand Press
Platen Machines
Vertical Platen Machines
Automatic Platens
Cylinder Machines
The Vertical Miehle
Miehle Two-revolution Cylinder Machine
Letterpress Rotaries
Machine Design And Make-ready in Relation to Ink
Letterpress, Typographic, or Relief Printing Inks
Factors Involved In Formulating the Ink
Making Platen and Cylinder Inks
Rotary News Inks
Type of News Ink Formulation
Ink Spray or Fly.

Berkâ€™s Heat-set Black News Ink
Flated News Inks
Type of Flatbed News Ink Formulation
Cheap Magazine Inks
Type of Cheap Rotary Magazine Ink
Slow-speed Rotary Magazine Inks
Formulation
Uses
Drying Oil Black Ink
Letterpress Inks Based on Special Varnishes:
Non-reactive Resin in Drying Oil
Non-reactive Resin in Drying-oil Ink
Letterpress Inks Based on Synthetic Resins
Letterpress Ink Formulations
Thinning and Reducing Platen and Cylinder Inks
Double-tone Letterpress Inks
I.C.I. Double-tone Letterpress Inks
Yellow-black Double-tone Ink
Nitrocellulose Inks
Special Letterpress Inks
Letterpress Ink Worries and Cures
Caking
Collecting Dirt
Colour Drift or Colour Variation
Colour Fade
Crystallization
Fast Drying Ink
Ink Flying or Spraying
Ink Retreat From Fountain Roller
Insufficient Gloss
Mottle
Picking or Plucking
Powdering or Chalking
Repeats or Ghost Duplicates
Set-off or Offset
Show-through
Slur
Trapping
Wipe
18. Special Inks
Ball Pen Inks

Bleachable Inks
Fluorescent Inks
Phosphorescent Pigments
Fluorescent Pigments
Pigment Manufacture
Printing
Silk-screen Fluorescent Printing
Power Press Printing
Invisible or Sympathetic Inks
Heat-sensitive Type
Water-sensitive Type
Chemically-sensitive Type
Metallic Inks
Pigments
Stock
Media
Letterpress Metallic Inks
Gravure Metallic Inks
Silk-screen Ceramic Metallic Inks
Printing Metallic Inks
Pigmentation
Summary
Washable Fabric Inks and Textile Marking Inks
Water-colour Inks
Inks for Special Reuirements
Low Odour Inks
Rub-resistant Inks
19. Natural Resins, Modified Natural Resins, and Bituminous Materials
Nature of Resins
Classification of Resins
Congo Copal
Manila Copal
Sierra Leone Copal
Zanzibar Copal
Amber
Damar
Rosin or Colophony
Rosin Oil
Polymerized Rosin
Hydrogenated and Oxidized Rosins
Tall Oil

Shellac
Sandarac
Mastic
Zein
Modified Natural Resins
Ester Gum
Lime-hardened Rosin
Bituminous Materials Nature
Asphalts
Bitumens
Pitches
Firnigrals and Iranolins
Uses in Printing Inks
20. Aniline, Dye-spirit, or Flexographic Inks
Transparent Aniline Inks
Uses And Advantages
Basic Dyes Suitable for Transparent Aniline Inks
Media
Pigmented Flexographic Inks
Synthetic Resins For Spirit Inks
Maleics
Pure Phenolics
Unesterified Rosin Modified Cresol-formaldehyde
Resins
Unesterified Rosin Modified Phenol-formaldehyde Resins
Miscellaneous Phenolics
Ketone-aldehyde Base Synthetic Resins
Spirit Type, Flexographic Ink Formulations
Flexographic Inks Not Based On Alcohol
Aniline Machines
21. Drying Oils,
The Nature of Drying Oils
The Acids Present In Drying Oils
Properties of Semi-drying Oils
Linseed Oil
Production of Raw Linseed Oil
The Refining of Linseed Oil
Bleaching of Refined Linseed Oils
Comparison of the Properties of Acid
Boiled Linseed Oil
Blown Linseed Oil

Heat-bodied Linseed Oil Or Stand Oil
Plant For Making Stand Oils
Catalysts For Bodying Linseed Oil
Improved Stand Oils
The Chemical Changes in the Heat Bodying
of Linseed Oil
Tung Oil
Properties of Tung Oil
Dehydrated Castor Oil (D.C.O.)
Castor Oil
Following The Dehydration
D.C.O. Stand Oils
Blown Dehydrated Castor Oil
Perilla Oil
Oiticica Oil
Stillingia Oil
Soya Bean Oil
Sunflower Oil
Tobaccoseed Oil
The Drying Oil Fatty Acids
Linseed Oil Fatty Acids (L.O.F.A.)
Dehydrated Castor Oil Fatty Acids (D.C.O.F.A.)
Semi-drying Oil Fatty Acids
Further Drying Oils
Improved Drying Oils By Processing
Fundamentally Modified Drying Oils
Vulcanized or Sulphurized Oils
Styrenated Oils
Maleinized Oils
Epoxidation And Hydroxylation Of Drying Oils
The Use Of Drying Ois In Printing Inks
22. Printing Ink Driers or Siccatives
Nature of Ink Driers
General Use of Driers
Paste And Liquid Driers
Theory of the Promotion of Drying
Methods of Preparation of Liquid Driers
Properties of Liquid Driers
Appearance of The Driers
Standard Specifications
The Use of Driers In Printing Inks

23. Ink on Surfaces other than Paper

General Principles

Cellophane Printing

Moisture-proof Viscous Film Printing

Polyethylene or Polythene Film Printing

Printing on Lacquers and Varnished Surfaces

Printing on Rubber

Printing on P.V.C.

Printing on Metal and Metal Foil

Printers's Use For Roller Coating

Roller Coatings

Cold-set Inks

24. Solvents, Diluents, and Plasticizers

General Properties of Solvents

Boiling Range

Flash Point

Evaporation Rate

Solvent Retention

Solvent Balance

Viscosity Changes During Drying

Solvent Power

Undesirable Solvent Properties Instability

Bad Odour

Bad Colour

Impurities

Toxicity

Petroleum Alkanes

Natural Petroleum

Petroleum Ether

S.B.P. Spirit

Petroleum Spirit, Ligroin Or Gasoline

White Spirit (W/S)

Mineral Oils

Coal-tar Hydrocarbons

Benzene C₆H₆

Toluene, C₆H₅CH₃, Methyl Benzene

Solvent Naphthas

Light Naphtha

Heavy Naphtha or Aromatic White Spirit (A.W.S.)

Terpene Solvents

Turpentine

Oxidized Turpentine

Dipentene, C₁₀H₁₆

Pine Oils

Hydrogenated Naphthalene Solvents

Decalin, C₁₀H₁₈

Tetralin C₁₀H₁₂

Alcohol Solvents

Ethanol, Ethyl Alcohol, CH₃CH₂OH

Isopropanol

Butanol CH₃CH₂CH₂CH₂OH

Methyl Isobutyl Carbinol (M.I.B.C.)

Diacetone Alcohol Or Dical

Benzyl Alcohol C₆H₅CH₂OH

Glycol Solvents

Ethylene Glycol HO.CH₂CH₂OH (E.g.)

Diethylene Glycol HO.CH₂CH₂O.CH₂CH₂OH. (D.E.G.)

Propylene Glycol CH₃.CHOH. CH₂OH (P.G.)

Dipropylene Glycol HO. (CH₂)₃.O. (CH₂)₃OH (D.P.G.)

Hexylene Glycol, 2 Methyl, (2, 4) Pentanediol (H.G.)

Ethers

Di-ethyl Ether, C₂H₅.O. C₂H₅

The Ether Alcohols or Cellosolves

Methyl Cellosolve / CH₃.O.(CH₂)₂.OH

Cellosolve, Ethylene Glycol Monoethyl Ether

Butyl Cellosolve CH₃.(CH₂)₃.O.(CH₂)₂OH

The Carbitols

Carbitol

Methyl Carbitol

Ketones

Acetone

Methyl Ethyl Ketone (M.E.K.) CH₃.CO. C₂H₅

Methyl Isobutyl Ketone (M.i.b.k.)

Isophorone, C₉H₁₄O

Sextone B, Methyl Cyclohexanone

Acetonyl Acetone, 2.5 Hexanediol

Furfural

Ester Solvents

Butyl Acetate. C₄H₉.COO.CH₃

Butyl Lactate C₄H₉COO.CHOH.CH₃

Plasticizers

Di-butyl Phthalate (D.B.P.)

Tri-phenyl Phosphate (T.P.P.)
Tri-cresyl Phosphate (T.C.P.)
Triacetin
Ethyl Abietate
Solvents From Petroleum
25. Printing Ink Carbon Blacks
Carbon Black
Manufacture of Impingement Channel Blacks
Furnace Combustion Blacks
Furnace Thermal Decomposition Blacks
Lamp Black
Charcoal Black
Bone Black
Mineral Black
Graphite
Cabot Nigrometer Scale
26. Waxes
Nature of Waxes
Mineral Waxes
Paraffin Wax
Microcrystalline Wax
Petroleum Jelly
Ozokerite
Montan Wax
Vegetable Waxes
Carnauba Wax
Candelilla Wax
Animal Waxes
Beeswax
Wool Wax or Lanolin
Tallow
Synthetic Waxes
Carbowaxes
Condensation Waxes or Glycol Ester Waxes
Acrawax
Chlorinated Naphthalenes
Polyethylene Waxes
Polyamide Waxes
Other Waxes
Uses of Waxes in Printing Inks
27. Selection of Media and Pigments for Printing

Suitability of a Resin for Letterpress and
Planographic Inks
Suitability of a Resin for Gravure Inks
Common Film Defects
Blooming or Blushing
Bubbling
Chalking
Checking
Cissing
Cracking or Flaking
Orange Peel
Pin-holding or Pitting
Wrinkling or Shrivelling
Webbing
Selection of Pigments
Comparison of Bronze, Ultramarine, and Monastral Blues
Nature of the Pigments
Masstone
Reduced Tones
Density and Oil Adsorption
Ease of Grinding
Resistance to Soap, Fats, Solvents, Water and Oils
Stability to Chemicals
Stability to Heat
Stability to Light
Pigmentation Limit
Length and Rheological Properties
Expense
Special Faults
Recommendations
Comparison of Chrome, Hansa, and Benzidine Yellows
Nature of Pigments
Specific Gravity, Opacity, Oil Adsorption and Brilliancy
Grinding and Rheological Properties
Stability to Heat and Light
Stability to Acids and Alkalis
Resistance to Fat, Soap, Wax, Oil, Alcohol, and Water
Special Advantages and Defects
Four-colour Process Pigments
Madder Lake Scale Test
28. Surface-Active Agents, Anti-oxidants, And

Adhesives
Surface-active Agents
Properties
Mode of Action
Evidence of Action
Types of Surface-active Agents
Lecithin
Uses in Printing Inks
Anti-oxidants
Guaiacol
Methyl Ethyl Ketoxime
Adhesives
Gum Arabic
Starch
Dextrin
29. Analysis and Calculation
Detection of Driers in Varnishes
Identification of White Pigments
Examination of Ash for Inorganic Pigments
Ink Analysis
Method
Ink Technology Calculations
30. Principles of Ink Formulation
Colour Matching
Grinding
Consistency
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 Web
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
Principle of Lithography
Essential Properties of Lithographic Inks

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

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