

A Concise Guide on Textile Dyes, Pigments and Dye Intermediates with Textile Printing Technology

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Format: Paperback

ISBN: 9789381039205

Code: NI249

Pages: 512

Price: Rs. 1,675.00 **US\$** 44.95

Publisher: NIIR PROJECT CONSULTANCY SERVICES

Usually ships within **5** days

In the past, only organic matter was available for making dyes. Today, there are numerous options and methods for the colorization of textiles. While today's methods capitalize on efficiency, there is question as to whether the use of chemicals is harmful to the environment. A reputation for harming the earth could be detrimental to a company in a society becoming more and more focused on the environment and its preservation. Today, with the invention of synthetic materials used in textiles, many new types of dyes have been developed and put into regular use. There are two basic ways to color textiles: dyes and pigments. Pigments are not a dye but rather resins mechanically bound to fibers. Dyes are divided into classes according to the types of fibers they are most compatible with. Textile printing is related to dyeing but, whereas in dyeing proper the whole fabric is uniformly covered with one color, in printing one or more colors are applied to it in certain parts only, and in sharply defined patterns. Dyes will yield the softest hand (the "hand" is the feel of the fabric) and maintain the fabric's luster but the process is expensive. Pigments are much more economical to use. Pigments are generally more lightfast, more colorfast, and give greater color control. Pigment technology has developed tremendously in the past 15 years. 85% of the textile printing in the World is pigment printing. This book contains manufacturing process and other related details about Azine dyes, Azoic dyes, Azo dyes, Thiazole dyes, Triphenylmethane dyes, scientific classification of Vat dyes, fluorination of dyes, different types of pigments, applications, usages of dyes and pigments, quality control and evaluation of pigments and many more. This book will serve as a guide to Textile Technologists, Scientists and existing as well as upcoming industries.

Contents

1. AZINE AND RELATED DYES

Methods of Manufacture

Oxazines

Dioxazines

Thiazines

Commercial Grades and Specifications

Methods of Analysis

Identification

Determination of Specific Structure

Assay Methods

Spectrophotometric Methods
Titration Methods
Miscellaneous Assay Methods
Application Methods
Application to Wool
Application to Cotton
Application to Paper
Application to Leather
Determination of Impurities
2. AZOIC DYES
Azo Coupling Components
Bases
Rapid Fast Colours
Rapidogens
Manufacturing Process
m-Nitro Aniline (Fast orange R)
Properties
Solubility
O-chloroaniline (Fast Yellow G, GC)
Properties of O-Chloroaniline
O-Anisidine (Fast Red BB
Reduction
Properties
Nitro-p-anisidine (Fast Bordeaux GP)
Purification
Nitration
Hydrolysis
Purification
Naphthol AS-OL
Physical Properties of Naphthol AS-OL
Naphthol AS G
Raw materials
3. AZO DYES
Methods of Manufacture
Methods of Analysis
Identification
Hydrolysis
Nitric Acid Split
Identification of Arylamines in Cleavage Products
Identification of Diamines in Cleavage Products
Identification of Coupling Components
Separation
Blowout Method
Adsorption Chromatography
Application Method
Assay Methods
Salt Test
Titanous Chloride Reduction
Absorption Spectrophotometry
4. THIAZOLE DYES
Direct Dyes, 918
Disperse Dyes, 924
Direct Dyes

Basic Dyes
Vat Anthraquinone Dyes
Health and Safety Factors
Disperse Dyes
Preparation of a Disperse Azo Dye
Cationic Dyes
Health and Safety Aspects
5. INDIGOSOL
Uses of Solubilised Vat Dyes
Manufacture Process Anthrasol Brilliant
Orange Irc (Leuco Sulphuric Ester of
Dibromoanthanthrone)
Test
Anthrasol Blue IBC
Oxidation to Tetraester
General Observations
Identification of Leuco Ester Vat Dyes
6. INDIGOID DYES
Methods of Manufacture
Commercial Grades and Specifications
Methods of Analysis
Identification
Classification of Dye Samples
Procedure
Classification of Dyes on Fiber's
Procedure
Identification of Individual Dyes
Spectrophotometric Identification
Separation
Column Chromatography
Paper Chromatography
Assay Methods
Vatting Method
Methanol-Hydrochloric Acid Method
Spectrophotometric Method
Titration Methods
Elemental Analysis
Halogens
Sulfur
Nitrogen
Determination of Impurities and Additives
Application Methods
7. REACTIVE DYES
History
Developments
Dyes can attach themselves to the fibre in three ways
8. TRIPHENYLMETHANE AND RELATED DYES
Methods of Manufacture
Aldehyde Method
Ketone Method
Hydrol Synthesis
Diphenylmethane Base Method
Methods of Analysis

Identification
Blowout Method
Capillary Test
Dyeing Test
Procedures
Assay Methods
Cerimetric Titration
Titanous Chloride Titration
Spectroscopic Methods
Purification of Standards
9. SCIENTIFIC CLASSIFICATION OF VAT DYES

Five Membered Rings
Two Heteroatoms
Attachment at 2-position
Attachment at 1,2-position
Attachment at 2,3-position
Attachment at 1,9-positions
Vat Dyes Containing Six Membered Rings
One Heteroatom
Attachment at 1, 9-positions
Attachment at 3,4-position of benzanthrone
Six Membered Rings Containing more than one
Heteroatom (from Anthraquinone)
Attachment at 1-position
Attachment at 1,2-positions
Attachment at 2,3-position
Attachment at 1,9-position
Fused Ring System
Dyes containing larger ring systems

10. FLUORINATION OF DYES

Hydrofluoric Acid
Materials of Construction
Fluorine
Material of Constructions
Indanthrene Brilliant Violet F3RK (C.I. 63350)
Indanthrene Blue CLB
Indanthrene printing blue HFG
Nuclear Fluorination

11. PIGMENTS

Chemical Analysis
General methods
Ash and Moisture Content
Alkalinity, Acidity, and pH
Material Soluble in Water
Presence of Organic Colours and Lakes
Pigment Content of Paste in Oil
Testing of Specific Inorganic Pigments
Titanium Dioxide Composites
Carbonate White Lead
Sulfate White Lead
Silicate White Lead
Zinc Oxide
Leaded Zinc Oxide

Zinc Sulfide
Lithopone
Antimony Oxide
Extenders
Calcium Carbonate
Calcium Sulfate
Magnesium Silicate
China Clays
Mica
Other Natural Silicates
Silica
Magnesium Carbonate And Magnesium Oxide
Barium Sulfate
Red, Maroon, And Brown Pigments
Iron and Manganese Oxide Pigments
Van Dyke Brown
Cadmium Mercury Reds
Copper Reds
Red Lead
Mercuric Oxide
Yellow and Orange Pigments
Iron Oxides
Chromate Pigments
Strontium Chromate
Green Pigments
Chrome Greens
Chromium Oxides
Blue and Purple Pigments
Iron Blues
Ultramarine Blues
Blue Lead
Cobalt Blues
Black Pigments
Carbon Black
Iron Oxide Blacks
Metallic Powders
Lead Powder
Zinc Powder
Testing of Specific Organic Pigments
Physical Testing of Properties
Colour
Tinting Strength
Opacity
Particle Size
Testing for Coarse Particles
Fine Particle Distribution
Oil Absorption
Dispersibility, Texture, and Rheology
Solubility
Density
Stability and Fastness
Other Properties
Perylene and Quinacridone Reds

Perylene Red Pigments

Preparation

General Properties

Perylene (Vermilian)

Pigment Red BL

Perylene Red

Perylene Maroon

Perylene Scarlet

Perylene Red Y

Quinacridone Red Pigments

General Properties

Rodamine Y (Pink toner)

Preparation

Properties of various red pigments compared:

Monazo Pigments

Naphthol red pigments

Precipitated (metalized azos) pigments

Non azo pigments

Pigment Orange-2 (Mono Azo Orthonitro Aniline Orange)

Pigment Orange-S (Mono Azo Dinitroaniline Orange)

Pigment Orange-13 (Pyrazolone Orange)

Pigment Orange - 16 (Dianisidine Orange)

Pigment Orange 17: 1 (Persian Orange Lake)

Pigment Orange-34 (Diarylide Orange, Disazo Pyrazolone)

Pigment Orange-36 (Benzimidazolone Orange

HL, Monoazo Acetoacetyl Type)

Pigment Orange-38 (Naphthol Orange)

Pigment Orange-43 (Perinone Orange)

Pigment Orange-46 (Ethyl red Lake C)

Pigment orange 48 and pigment orange 49

(Quinacridone gold and quinacridone deep gold)

Pigment Orange 51 (Pyranthrone Orange)

Organic Yellow Pigments

C.I. Pigment Yellow 1

C.I. Pigment Yellow 3

C.I. Pigment Yellow 3

Cl. Pigment Yellow 65 (Arylide Yellow RN)

Pigment yellow 74 is an isomer of P. Y .65 and

possesses identical characteristics

C.I. Pigment Yellow 98

Diarylides

C.I. Pigment Yellow 12

Cl. Pigment Yellow 13

C.I. Pigment Yellow 14

Cl. Pigment Yellow 17 (Diarylide Yellow AAOA)

Cl. Pigment Yellow 81 (Diarylide Yellow H10 G)

Heterocyclic yellow organic pigments

Cl. Pigment Yellow 24 (Flavanthrone Yellow)

Cl. Pigment Yellow 60 (Arylide Yellow 4R)

C.I. Pigment Yellow 100 (FD & C Yellow No. 5)

C.I. Pigment Yellow 104 (FD & C Yellow No. 6)

Organic Green Pigments

C.I. Pigment Green

C.I. Pigment Green 4r (Melachite Green PTMA)
Copper phthalocyanine green
C.I. Pigment Green 10 (Nickel Azo Yellow: Green Gold)

12. INTERMEDIATES FOR DYES AND PIGMENTS

Electrophilic

Free Radical

13. APPLICATION, USAGES OF DYES AND PIGMENTS ON TEXTILES

Introduction

Colour Index

Preparation of The Textile Material Prior to
Colouration

Dyeing of Textiles

Substantive or Direct Dyes

(a) Cationic Dye-fixing agents:

(b) Copper Sulphate + Sodium or Potassium
Dichromate + Acetic Acid:

(c) Chromium Fluoride or Acetate + Acetic Acid :

(d) Formaldehyde:

(e) Diazotization and Development:

(f) Coupling with diazotized Fast Bases:

(g) Topping with Basic Dyes:

(h) Back-tanning of Nylon-dyed with Direct Dyes:

S.D.C.Classification of Direct Dyes with regard to
levelling properties

Basic and Modified Basic Dyes

Acid and Metal Complex Dyes of the
Acid Class

Details of Dyeing

Other Usages

Cellulose Diacetate

Bast Fibres

Paper

Leather

Miscellaneous Uses

Chrome and other Mordant Dyes

Chrome Dyes

Reactive Dyes

Dissolving of Reactive Dyes

Dyeing of Cotton

Other Uses of Reactive Dyes

Wool Dyeing

Silk Dyeing

Nylon Dyeing

Reactive Disperse Class

Dyeing Procedure

Reactive Wool Dyes

Dyeing Procedure

Azoic or Insoluble Azo Dyes

Dyeing Procedure

Impregnation in Naphthol

Developing Bath

Aftertreatment

Note
Popular Azoic Combinations
New Developments in Azoic range by Hoechst
Specialized application for dyeing of Warp yarn applied during sizing for Cotton Denim, Jean etc.
Procedure
Azoic Dyestuffs on other Textile Fibres
Sulphur Dyes
Application
Standing Bath
Aftertreatment
Recent Developments
Vat, Solubilized Vat and Sulphurized Vat Dyes
Vat Dyes
Indigoid Vat dyes
Dyeing by Pigmentation procedures
Pigment Padding
Pad-steam-continuous Dyeing process
Wet-on Dry process
Wet-on Wet Process
The Standfast Molten Metal Dyeing Process
Dyeing at Elevated Temperature
Vat Acid Leuco Method
Dyeing of Vat dyes on Pure Silk
Dyeing of Vat dyes on Wool
Dyeing of Synthetics
Dyeing of Bast Fibres
Other Uses
Dyeing of Indigo
Indigo for Cotton Denims
Wool
Sulphurized Vat Dyes
Dyeing Procedure
Solubilized Vat Dyes
Application
All-jig Process
Pad-jig Process
Aftertreatment
Continuous Dyeing Process
Dyeing of other materials
Disperse Dyes
Classification of the various Disperse Dyes according to their Dyeing characteristics:
Rapid Dyeing Dyes
Dyeing of Disperse Dyes on Polyester
Dyeing Methods
Dyeing of Blends of Polyester with other fibres
Dyeing of Disperse Dyes on other fibres and Miscellaneous applications
Colouring of Smoke Clouds
Pigments (Emulsion Composition & Dry Powder)
Application
Printing of Cotton

Sequence
Dyeing of Cotton Piece Goods with Pigment emulsion
Daylight Fluorescent Pigments for Printing
Ingrain Dyes
Dyeing with C.I. Ingrain Blues 2 on Cotton
Typical examples of Dyeing Procedures
Dyeing of C.I. Ingrain Blue 1 on Cotton
(Alcian Blue 8GX - 300 (I.C.I.)
Solvent Dyes & Food Colours
Oxidation Bases
Dyeing of Aniline Black
Cotton yarn by one-bath process
Oxidation Aniline Black (also called Aged Aniline Black)
Other uses of Oxidation Bases
Mineral Khaki (Inorganic Colourant)
Sequence
Dark Olive Green/Scamic green shade for certain categories of
Cotton material for Defence services (India)
Topping with Mineral Khaki on pre-dyed material with
Vat dyes
Fluorescent Brighteners
Natural Dyes (C.I. Natural Colour Class)
Useful Information in Dyeing & Printing
(i) Liquor-to-goods ratio or Material-liquor ratio denoted as
"M.L.R."
(ii) Depth of Shade in Dyeing
(iii) Padding
(iv) Depth of Shades in Printing
Printing of Textiles
Styles in Printing
They are:
Direct Printing Styles on Cellulosics
Printing with Reactive Dyes
Printing with Pigment Printing Compositions
Printing with Azoics
Naphthol-Nitrite Padding process
Printing with "Rapid Fast" (Hoechst) Dyes
Printing with "Rapidogen" (Bayer) Dyes
Non-acid Steam Process for Rapidogens
Printing with Vat dyes
Typical Recipes
Flash-ageing method
Printing with Solubilized Vat Dyes
Non-steaming Method
Steaming Method using Ammonium Sulphocyanide
Printing Sequence
Printing with Ingrain Dyes
(a) Printing with Alcian - 'X' (ICI) dyes
(b) Printing with Phthalogen Brilliant Blue IF-3G (Bayer)
Printing with Aniline Black
(Oxidation Base Class)
Typical recipes
Printing with Alizarine Red (Mordant Class)

Typical recipes
Printing with Direct Dyes
Typical recipe for printing of Directs
Basic Dyes
Direct Printing of Selected Dyes of
Different Classes Alongside or
Admixed with each other
Typical recipes (Block Prints)
Direct Printing Style on Pure Silk
Typical recipes
Direct Printing Style on Wool
Typical recipes
(i) Reactive Dyes (All types)
(ii) Acid Dyes
(iii) Chrome Dyes
(iv) Metal-complex Dyes (11) particularly Black
Printing of Tufted Carpets
“Vigoureux” or “Melange” Printing
Typical recipes
With Acid Milling and 2:1 Metal-Complex Dyes
Direct Printing Style on Nylon
Typical recipes
Pigment Emulsions
Direct Printing Styles on Polyester,
Triacetate and Diacetate with Disperse
Dyes
Process after Printing
“Melange (Vigoureux)” Printing of Polyester Sliver
Cellulose Triacetate
Cellulose Diacetate
Direct Printing Styles on Acrylics
Sequence
Direct Printing Styles on Fabric
From Fibre Blends
(i) Polyester/Cellulose
(ii) Polyester/Wool
(iii) Cellulosic fibre/Wool
(iv) Cellulosic fibre/Silk
(v) Wool/Silk
(vi) Cellulosic fibre/Diacetate
(vii) Cotton viscose or Polynosic fibre etc
Resist Printing Style on Cellulosics
Resists under Naphthols
Resists Under Vat
Typical recipes
Resists under Solubilized Vats
Rapldogen Resists
Rapid Fast Resists
Resists under Reactives
Reactive Dyes Resists under Reactive dyes using
Remazol-type Dyes for the ‘Ground’ shade and
Proclon-type Dyes as ‘Illuminants’
Resists under Aniline Black

White Resist
Coloured Resists under Aniline Black
Basic Colour Resists
Resists under Phthalogen Brill Blue IF3G (Bayer) ground
Resists under Basic dyes
Resists under Acid Milling dyes and 2 1 Metal Complex dyes dyed on Pure Silk
Discharge Printing Style
(a) White discharge
(b) Colour discharge
Discharge Printing on Dyed Cellulosics
(a) On Direct dyes dyed ground
(b) Discharge Printing on Naphthol Dyed Ground
(c) Discharge printing on Reactive dyes dyed ground
Discharge Printing of Dyed Natural Silk
Based on Sodium, Sulphoxylate Formaldehyde (Rongolite C)
Based on Sodium-Bisulfate + Zinc Dust
Illuminant Dyes (for Colour discharge)
Discharge Printing of Dyed Wool
With Acid/Direct dyes
Discharge Printing of Polyester Dyed with Disperse Dyes
Ground shades for Discharge printing
Pre-dyeing by pad method
Pre-dyeing by H.T. process
Pre-printing
Typical examples for Discharge printing
Procedures for Discharge Printing of Polyester dyed by H.T. dyeing
Discharge Printing of Dyed Cellulose DI & TRI Acetate and Nylon
Typical Recipes
White Discharge on Cellulose Diacetate and Nylon dyed with Disperse dyes
Colour Discharge of Nylon dyed with Disperse Dyes
Discharge Printing of Nylon dyed with suitable dischargeable Acid, Metal-complex and some limited Direct Dyes
Miscellaneous Applications in Dyeing and Printing
Transfer printing
Mechanical Resist Colouration
Resist Printing of Vinyl Sulphone type Reactive Dyes by "Blocking" Chemically the Reactive group
"Khadi" Printing
Conversion Style of Printing
Novel graded-shade effect on Cotton yarn by "Dyeing
Polychromatic Dyeing
Speckle Printing
Burn-out Styles
After treatment
14. COLOURANTS FOR DRUG
15. QUALITY CONTROL AND EVALUATION OF PIGMENTS

Quality Control
Evaluation of Pigments
Physical Properties of Pigment
Moisture Content
Procedure
Bulking Volume
Procedure
Mesh Residue
Particle Size
Solvent Stability
Aim
Importance of the test
IS Value
pH of the Pigment
Oil Absorption
Raw Materials Required
Defination of Oil Absorption
Opacity
Colour
Reduction Tone
Raw Materials Used
Other materials required
By Automatic Muller
Mass Tone
Apparatus required
Raw Material required
Dispersibility, Texture, and Rheology
Stability and Fastness
Other properties
To determine the sp. Gravity of Pigment
Method
Volumetric Method for the determination of
Copper in Cuprous Chloride
Estimation of Organically Bound Chlorine
Calculation
The Infra-Red Identification of Pigments

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Wed, 10 Aug 2022 10:44:25 +0530