

Industrial Chemicals Technology Hand Book

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About the Book

Growth in demand for chemicals in developing countries is high leading to substantial cross border investment in the chemical sector. The chemical industry comprises the companies that produce industrial chemicals. Chemicals are used to make a wide variety of consumer goods, as well as thousands inputs to manufacturing, construction, and service industries. The applications of industrial chemical are in various fields like in organic chemicals, paint, varnishes, resins, petroleum, pigments, printing inks, acrylics polyesters engineering thermoplastics. The chemical industry itself consumes 26 percent of its own output. In modern age chemical industries have permeated most extensively in comparison with other industries and are progressing at a very rapid pace. Chemical industry is one of the oldest industries in India. It not only plays a crucial role in meeting the daily needs of the common man, but also contributes significantly towards industrial and economic growth of the nation. The chemical industry forms the backbone of the industrial and agricultural development and provides building blocks for downstream industries; it is an important constituent of the Indian economy. The chemical industry in India which generates almost 13% of total national export is growing annually at a growth rate anywhere between 10% and 12%. Global chemical production is growing and the growth is contributed by the chemical industry of developing countries.

The book contains manufacturing processes, reactions, equipments details, process flow diagram of number of chemicals, which have huge industrial uses. The major contents of the book are iodine from oil well brines, lactic acid from corn sugar, modern production of chlorine and caustic soda, organic chemicals, chemicals derived from methane and so on.

This book is very useful for new entrepreneurs, industrialists, consultants, research scholars, technical institutions, chemists and libraries. This book is recommended to all related to field of chemical process technology.

Contents

1. Iodine From Oil Well Brines

Brine Collection

Brine Cleanup

Blowing-Out And Recovery

Iodine Finishing

Process Control

2. Lactic Acid From Corn Sugar

Dextrose, Whey, Or Molasses May Be Used For Lactic Acid Fermentations

Four Different Grades

In Commercial Practice Yields Of 85% Of Fermentable Hexose Are Normal

L. Delbruckii Is Culture Used; Corn Sugar Is Principal Fermentation Medium
Calcium Lactate Is Produced During 4- To 6-Day Fermentation Period
Recycled Calcium Sulfate Added To Aid Filtration
Calcium Lactate And Sulfuric Acid React To Form Lactic Acid
Stainless Steel Is Used For Acid Evaporators
Calcium Lactate Is Also Processed As An End Product
Fermentation Processes Operate Around The Clock
Corrosion Is A Major Problem In Production Of Lactic Acid
Foods And Tanning Industries Use Large Quantities Of Lactic Acid
Salts And Other Derivatives Are Used In Diversified Industries
Future Expansions In Lactic Acid Production Must Supply A Quality Product At A Lower Price

3. Modern Production Of Chlorine And Caustic Soda

Raw Materials
Storage And Preparation
Chlorine Production
Caustic Preparation
Hydrogen Chloride
Filling And Storage Systems
Instrumentation And Safety

4. Nitrofurans

Uses For Nitrofurans Extend Into Fields Of Both Human And Veterinary Medicine
Synthesis Of 5-Nitro-2-Furaldehyde Diacetate Is Initial Phase Of Batchwise Procedure
5-Nitro-2-Furaldehyde Diacetate Is Reacted With Semicarbazide To Form Nitrofurazone
Synthesis Of Furazolidone Is Based On Reaction Of 3-Amino-2-Oxazolidone With 5-Nitro-2-Furaldehyde Diacetate
Analytical Tests Are Run On All Raw Materials And Final Products

5. Organic Chemicals

Chemicals Derived From Methane
Synthesis Gas
Chloromethanes
Acetylene
Hydrogen Cyanide
Carbon Disulfide
Chemicals Derived From Ethylene
Polyethylene
Ethylene Oxide
Chlorinated Ethanes And Ethylenes
Ethanol
Ethylbenzene
Acetaldehyde, Acetic Acid, Acetic Anhydride, Vinyl Acetate
Ethylene Oligomers (Alpha Olefins) And Linear Primary Alcohols
Ethylene-Propylene Elastomers
Propionaldehyde
Other Ethylene Uses
Chemicals Derived From Propylene
Polypropylene
Acrylonitrile
Propylene Oxide

Isopropyl Alcohol
Cumene
Oxo Chemicals
Propylene Oligomers, Dodecene, And Nonene 91
Acrylic Acid And Esters
Glycerin
Chemicals Derived From Butanes And Butylenes
N-Butane Derivatives
Isobutanes
Butylenes
Isobutylene
Butadiene
Higher Aliphatic Hydrocarbons
Cyclopentadiene
Isoprene
N-Paraffins
Linear Olefins
Primary And Secondary Higher Alcohols
Chemicals Derived From Benzene, Toluene, And Xylene
Chemicals From Benzene
Styrene
Cumene (Phenol)
Cyclohexane
Maleic Anhydride
Detergent Alkylate
Nitrobenzene (Aniline)
Chlorobenzenes
Derivatives Of Toluene
Toluene Diisocyanate (Tdi)
Benzoic Acid
Benzyl Chloride
Chemicals From Xylene
Terephthalic Acid (Dimethyl Terephthalate)
Phthalic Anhydride
Isophthalic Acid
Naphtalene Derivatives

6. Paint, Varnishes, Resins

Butyl Acetate
N-Butyl Acetate
Iso-Butyl Acetate
Sec. Butyl Acetate
Tert-Butyl Acetate
Manufacturing Process
Note
Reaction
Flow Diagram
Uses
Grades
Toxicity
Epoxy Resins

Properties

Properties Of Typical Commercial Bisphenol A Epoxy Resins.

Manufacturing Process

Formaldehyde

Manufacturing Process

From Methanol

Hexamethylene Tetramine

Manufacturing Process

From Formaldehyde And Ammonia

Reaction

Flow Diagram

Uses

Grades

Toxicity

Solubility Of Pentaerythritol

Manufacturing Process

From Formaldehyde And Acetaldehyde

Reaction

Flow Diagram

Note

Uses

Grades

Specifications Of Pentaerythritol

Toxicity

7. Petroleum And Its Products

The Nature Of Petroleum

Largest Energy Supplier

Product Names

Refined Product

Product Specifications

Product Yields

Petrochemicals

Refining Schemes

Feedstock Identification

Crude Oil Pretreatment

Crude Oil Fractions

Gasoline

Volatility

Sulfur Content

Octane Number

Distillates

Residuals

Producing More Light Products

Cracking

Vacuum Distillation

Reconstituting Gases

A Modern Refinery

Petrochemicals

Process Details

Crude Desalting

Crude Distillation
Hydrotreating
Catalytic Reforming
Catalytic Cracking
Coking
Hydrocracking
Polymerization
Alkylation
Ether Processes
Future Processing

8. Pigments

Carbon Black
From Oil Or Natural Gas (Furnace Process)
Reaction
Flow Diagram
Note
From Natural Gas (Channel Process)
Reaction
Note
Uses
Grades
Titanium Dioxide
Typical Pigment Properties Of Anatase And Rutile Tio₂
Typical Crystal Properties Of Rutile And Anatase Tio₂
Manufacturing Process
Sulphate Process
Note
Reaction
Chloride Process
Note
Grades
Toxicity
Manufacturing Process
From Zinc Metal
(French Or Indirect Process)
Note
Reaction
Flow Diagram
From Zinc Sulphide Ores
Reaction
Flow Diagram
Note
Uses
Grades
Toxicity

9. Pigments, Paints, Polymer Coatings Lacquers, And Printing Inks

Powder Coatings
Electron Beam (Eb) And Ultraviolet (Uv) Curable Coatings
Current Automotive Coating Trends

Coatings For Plastics
New Cross-Linking Technologies
Printing Inks
Pigments
Inorganic Pigments
Organic Pigments
Pearlescent Pigments
Aluminum Pigments
Lacquers

10. Potassium Borohydride Manufacture
Like Sodium Borohydride
Metal Hydride's Process
Potassium Borohydride's Properties
First Make Sodium Hydride Dispersion
Next Major Step-Make Sodium Borohydride
Mineral Oil Dispersion
Splitting Comes Next
Analytical Program

11. P-Xylene From Petroleum
Low Temperature Crystallization Is The Standard Recovery Method
Eutectic Point Limits P-Xylene Yield To 10% Of The Xylene
First Crystallization Stage Produces 80% Purity P-Xylene
Secondary Crystallization Increases Product Purity To Better Than 95%
Product Quality Depends Largely On Crystallization Techniques

12. Reagent Grade Chemicals
Standardization
Barium Chloride
Sulfanilic Acid
Magnesium Sulfate
Ferrous Ammonium Sulfate
Potassium Metaperiodate
Cuprous Thiocyanate
Analysis And Packaging
Future Prospects

13. Salt Manufacture
The Brine Must Be Purified Before Use
Multiple Effect Evaporators Are Used For Vacuum Pan Salt
Salt Evaporation Has Many Special Problems
Dewatered Salt Must Be Dried, Screened, And Packaged
Grainer Salt Is Made By Evaporation In Open Pans

14. Sulfuric Acid From Anhydrite
Theoretical Studies And Chemistry Of Anhydrite Process
Contact Process

15. Synthetic Methanol Production
History Of Synthetic Methanol



Foreign Development
Operating Data For Methanol Process
Gas Stream
Steam Systems
Water Systems
Synthesis Gas Preparation
Addition Of Carbon Dioxide
Compressor Cycle
Converter System
Converter Auxiliaries
Refining By Distillation
Loading And Shipping
Instrumentation
Chemical Control
Maintenance Procedure

16. Synthetic Nitrogen Products

Nitrogen Fixation
Nitrogen Oxides
Ammonia
Other Processes
Calcium Cyanide
Ammonia
Manufacturing Processes
Carbon Monoxide Shift
Carbon Dioxide Removal
Water
Hot Potassium Carbonate
Monoethanolamine (Mea)
Sulfinol
Propylene Carbonate
Rectisol-Refrigerated Methanol
Giammarco-Vetrocoke
Final Purification
Methanation
Nitrogen Wash Operation
Copper Ammonium Carbonate Scrubbing
Selective Oxidation Of Carbon Monoxide
Cryogenic Purifier
Compression
Ammonia Synthesis
Modern Single-Train Ammonia Plants
Uses Of Ammonia
Nitric Acid
Chemistry Of Ammonia Oxidation
Processes
Uses Of Nitric Acid
Ammonium Nitrate
Urea
Uses Of Urea
Melamine

Aliphatic Amines
Methylamines
Hexamine
Hydrazine
Manufacture
Hydrazine Handling
Hydrogen Cyanide
Manufacture
Other Compounds
17. Synthetic Resins & Plastics
Introduction
Polymer Structure And Nomenclature
Properties Of Resins And Plastics
Important Classes Of Plastics And Ins: Thermoplastics Polyolefins
Vinyl Resins
Polystyrene And Styrene Copolymers

Acrylics
Polyesters
Engineering Thermoplastics
Important Classes Of Plastics And Resins: Tosets 433
Polyurethanes
Phenolic Resins
Unsaturated Polyester Resins
Epoxies
Silicone Resins
Polymer Synthesis
Free Radical Addition Polymerization
Ionic Chain Addition Polymerization
Ring Opening Addition Polymerization
Polymer Modification
Polymerization Methods
Polymer Rheology
Fabrication Of Plastics
Extrusion
Injection Molding
Reaction Injection Molding (Rim)
Compression And Transfer Molding
Pultrusion
Blow Molding
Thermoforming
Rotational Molding
Foamed Plastics
Plastics And Environmental Issues

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