

# Modern Technology Of Oils, Fats & Its Derivatives (2nd Revised Edition)

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Until recently fats and oils have been in surplus, and considered a relatively low value byproduct. Only recently have energy uses of fats and oils begun to be economically viable. Food value of fats and oils is still far above the energy value of fats and oils. Industrial and technical value of fats and oils is still above the energy value of fats and oils. Animal feeds value of fats and oils tends to remain below the energy value of fats and oils.

With development of new technology oils and fats industry has undergone a number of changes and challenges that have prompted the development of new technologies, and processing techniques. Oils and fats constitute one of the major classes of food products. In fact oils and fats are almost omnipresent in food processing – whether naturally occurring in foods or added as ingredients for functional benefits and, despite the impression given by several sources to the contrary; they remain an essential part of the human diet. However, it is increasingly apparent that both the quantity and the quality of the fat consumed are vital to achieve a balanced diet. They are essential constituents of all forms of plant and animal life. Oils and fats occur naturally in many of our foods, such as dairy products, meats, poultry, and vegetable oil seeds. India is the biggest supplier of greater variety of vegetable oil and still the resources are abundant. The applications of oils are also seen in paints, varnishes and related products. Since the use of oils and fats in our daily life is very noticeable the market demands of these products are splendid.

Special efforts has been made to include all the valuable information about the oils, fats and its derivatives which integrates all aspects of food oils and fats from chemistry to food processing to nutrition. The book includes sources, utilization and classification of oil and fats followed by the next chapter that contain details in physical properties of fat and fatty acids. Exquisite reactions of fat and fatty acids are also included in the later chapter. It also focuses majorly in fractionation of fat and fatty acids, solidification, homogenization and emulsification, extraction of fats and oils from the various sources, detail application in paints, varnishes, and related products is also included. It also provides accessible, concentrated information on the composition, properties, and uses of the oils derived as the major product followed by modifications of these oils that are commercially available by means of refining, bleaching and deodorization unit with detailed manufacturing process, flow diagram and other related information of important oils, fats and their derivatives. Special content on machinery equipment photographs along with supplier details has also been included.

We hope that this book turns out to be considerate to all the entrepreneurs, technocrats, food technologists and others linked with this industry.

# Contents

1. SOURCES, UTILIZATION, AND CLASSIFICATION OF OILS AND FATS
  - Classification of Fats and Oils
    - Milk Fat Group
    - Lauric Acid Group
    - Vegetable Butter Group
    - Animal Fat Group
    - Oleic-Linoleic Acid group
    - Erucic Acid Group
    - Conjugated Acid Group
    - Marine Oil Group
    - Hydroxy Acid Group
2. PHYSICAL PROPERTIES OF FATS AND FATTY ACIDS
  - Oiliness and Viscosity
  - Surface and Interfacial Tension
  - Density in the Solid State
  - Density and Volume of Plastic Fats Dilatometry
  - Heat of Combustion
  - Specific Heats, heats of Fusion or Crystallization
  - Vaporpressure and Boiling Points. Heat of Vaporization
  - Thermal Conductivity
  - Miscibility with Organic Solvents
  - Solubility in Organic Solvents
  - Mutual Solubility of Fats and Fatty Acids with Water
  - solubility of Gases In Fats
  - Refractive Index
  - Absorption Spectra
  - Resistance
  - Dielectric Constant
3. REACTIONS OF FATS AND FATTY ACIDS
  - Hydrolysis
  - Interesterification
  - Saponification with Alkalies
  - Formation of Metal Soaps
  - Hydrogenation in the Carboxyl Group
  - Formation of Nitrogen Derivatives
  - Formation of Acid Chlorides
  - Hydrogenation
  - Halogenation
  - Addition of Thiocyanogen
  - Addition of Maleic Anhydride
  - Sulfation, Sulfonation
  - Chemical oxidation Epoxidation and hydroxylation
  - Atmospheric oxidations Rancidity
  - Polymerization
  - Isomerization
  - Reactions of Hydroxyl Groups
  - Preparation of Ketones, Aldehydes, and Hydrocarbons from Fatty Acids
  - Pyrolysis to Produce Motor Fuels
  - Manufacture of Sebacic Acid
4. VINYL LAURATE AND OTHER VINYLE ESTERS

## 5. LINOLENIC ACID AND LINOLENYL ALCOHOL

Some Reaction Products

Linolenyl Alcohol

Linolenyl Aldehydes

Miscellaneous

## 6. FRACTIONATION OF FATS AND FATTY ACIDS

Fractional Crystallization

Winterization of Vegetable Oils

Cold Clearing of Fish Oils

Fractional Crystallization of animal Fats

Crystallization of Vegetable Stearines

Fractional Crystallization of Fatty Acids

Liquid-Liquid Extraction

Solvents for Liquid-Liquid Extraction Liquid-Liquid Extraction In Practice

Theory and General Practice

Purification of Fatty Acids by Distillation

Fractional Distillation of Fatty Acids

Molecular Distillation

Methods Involving Chemical Reaction

Urea Adducts

Chromatography

Countercurrent Distribution

Recovery of Minor Constituents

## 7. SOLIDIFICATION, HOMOGENIZATION, AND EMULSIFICATION

Plasticizing of lard and Shortenings

Solidification of Margarine

Solidification of Soap Products

Emulsification

Peanut Oil

Milling of Groundnut

Effect of Storage of Groundnut Kernels on the Yield & Quality of Oils and Cake

Effect of Size Reduction of the Kernels Prior to Crushing

Cooking of Prepared Seed Material

Optimum Quantity of Oils to be left in the First Pressed Cake

Summary of The Results

Olive Oil

Palm Oils

Sesame Oil

Corn Oil

Safflower Oil

Tobacco Seed Oil

Poppyseed Oil

Teased Oil

Kapok Oil

Rice Bran Oil

Sorghum oil

Other Oleic-Linoleic Oils

Rapeseed Oil

Other Erucic Acid Oils

Linolenic Acid Oils

Soybean Oil (91)

Perilla Oil

Hempseed Oil

Wheat Germ Oil  
Horse Fat  
Other Linolenic Acid Oils  
Conjugated Acid oils  
Tung Oils  
Oiticica oil  
Ises in coating  
In Conclusion  
Marine Oils  
Whale Oil  
Sardine or Pilchard Oil  
Japanese Sardine Oil  
Menhaden Oil  
Herring Oil  
Fish Liver Oils  
Hydroxy Acid Oils  
Castory Oil  
8. KOKUM  
Garcinia Indica Chois  
Description  
Flowering And Fruiting  
Distribution  
Estimation of Seed Production  
Collection of Seeds  
Oil  
9. MAHUA  
Description  
Flowering And Fruiting  
Distribution  
Locality Factors  
Propagation  
Estimation of Seed Production  
Other Uses  
10. NEEM  
Description  
flowering and Fruiting  
Distribution  
Locality Factors  
Propagation  
Usefulness in Afforestation  
Estimation of Seed Production  
Collection And Storage of Seeds  
Oil Other Uses  
11. PUNNA, UNDI  
Flowering And Fruiting  
Distribution  
Locality Factors  
Propagation  
Estimation of Seed Production  
Collection of Seeds  
Oil  
Uses of the oil  
Other Uses

## 12. KARANJ

Description

Flowering & Fruiting

Distribution

Locality Factors

Propagation

Usefulness in Afforestation

Estimation of Seed Production

Collection and Storage of Seeds

Oil

Uses of the oil

Other uses

## 13. KUSUM

Description

Flowering And Fruiting

Distribution

Locality Factors

Propagation

Estimation of Seed Production

Collection of Seeds

Oil

Uses of the oil and Cake

## 14. DHUPA

Description

Flowering and Fruiting

Distribution

Locality Factors

Propagation

Estimation of Seed Production

Collection of Seeds

Fat

Uses of Fat

Other uses

## 15. NAHOR

Description

Flowering and Fruiting

Distribution

Locality Factors

Propagation

Estimation of Seed Production

Collection of seeds

Oil

Uses fo The oil

Refining of oil

Other Uses

## 16. KHAKAN, PILU

Description

Flowering And Frutting

Distribution

Locality Factors

Propagation

Usefulness in Afforestation

Estimation of Seed Production

Collection and Storage of Seeds

Fat

Other used

17. PISA

Description

flowering and Fruiting

Distribution

Locality Factors

Propagation

Estimation of Seed Production

Collection and Processing of Seed

Oil

18. TALL OIL

Recovery of Tall oil

Application of Tall oil

19. TALL OIL PRODUCTS IN SURFACE COATINGS

Tall Oil in Alkyd Resins

Tall Oil Formulation in Alkyd Resins

Esters of Tall Oil Products

Other Uses for Tall Oil Products

20. TALL OIL IN THE PLASTICIZER FIELD

Tallate Driers

Esterification of Tall Oil For Plasticizers

Tall oil in Adhesives and Linoleum Cement

Tall oil In Rubber-Based Adhesives

Tall Oil In Hot-Melt Adhesives

Tall Oil Production in Linoleum Cements

Formulation with Tall Oil

Formulation with Tall Oil Esters

Tall Oil in Asphalt Products and Petroleum uses

Tall Oil In Asphalt

Roads

Soil Treatment

Roofing

Adhesives

Antistripping Agents

Plasticizers

Miscellaneous

Tall Oil In Petroleum Application

Oil and Gas Well Fracturing

Drilling Muds

Demulsification Agents

Corrosion Inhibitors

Catalyst

Lubricating Oil Additives

21. TALL OIL IN LIQUID SOAPS

Tall Oil In Disinfectants

Tall Oil In Synthetic Detergents & Wetting Agents

Tall Oil In Biodegradable Detergents

22. TALL OIL IN RUBBER

Styrene-Butadiene Rubber

Foam rubber

Tall Oil In Paper Size

Paper Making Process  
Rosin Sizing Materials  
Forms of Size Available  
Paste Size  
Dry Size  
Methods of Preparing Liquid Size  
Cooking Process  
Emulsion Process  
Bewoid Process  
Delthirna Process  
Internal And External Sizing  
Effect of Wet Strength Resins and Paper Coating Resins of Sizing  
Sizing of Nonconventional paper  
Testing of Sizing

### 23. SOAP AND OTHER SURFACE ACTIVE AGENTS

Commercial Soap Products  
Characteristics of Soaps Saponified by different Methods  
Effect of Different Factors on Physical Characteristics of Bar Soaps  
Types of Commercial Soap  
Surface-Active Agents Other Than Soap  
Classification of Surfactants  
List of Surfactants  
Anionic Surfactants  
Nonionic Surfactants  
Ampholytic Surfactants  
Applications  
Detergents  
Wetting Agents

### 24. PAINTS, VARNISHES, AND RELATED PRODUCTS

Materials  
Unmodified Drying Oils  
Modified Drying Oils  
Resins and Copolymerizing Materials  
Dryers  
Thinners  
Pigments  
Miscellaneous Engredients  
Manufactured Products  
Oil Paints  
Varnishes Adn Enamels  
Water-Dispersible Paints  
Printing Inks  
Manufacturing Operations  
Cooking of Varnishes and Resins  
Mixing and Grinding  
Other Mechanical Operations

### 25. MISCELLANEOUS OIL AND FAT PRODUCTS

Linoleum  
Oiled Fabrics  
Putty and Other Sealing or Calking Materials  
Rubberlike Materials  
Core Oils  
Lubricating Greases

Cutting Oils  
Oil For Leather Treatment  
Textile Lubricants and Softening Agents  
Plasticizers  
Illuminants and Fuels  
Cosmetic And Pharmaceutical Oils  
Tinning Oils  
Hydraulic Oils  
Insecticides and Fungicides  
Commercial Stearic and Oleic Acids  
Other Fatty Acids  
Metal Soaps

#### 26. ISOCYANATE-MODIFIED DEHYDRATED CASTOR OIL

Introduction  
Materials and Methods  
Analytical Methods  
Preparation of Urethane Derivatives  
Film Characteristics  
Results and Discussion

#### 27. STYRENE COPOLYMERISATION OF ISOMERISED TOBACCO SEED (NICOTIANA TOBACUM) OIL AND ITS ALKYD

Experimental  
Materials used  
Isomerisation  
Styrenation of tobacco seed oil  
Preparation of styrenated alkyds  
Post-styrenation Process  
Results and Discussion  
Isomerisation  
Styrenation  
Drying Characteristics  
Flexibility and Adhesion  
Scratch hardness  
Water resistance  
Acid resistance  
Alkali Resistance  
Conclusion

#### 28. MODIFIED MAROTI OIL (HYDNOCARPUS WIGHTIANA) FOR ALKYDS

Experimental Techniques and Results  
Formulation of alkyds  
Evaluation of film properties  
Discussion  
Conclusion

#### 29. IMPROVED ALKYDS WITH EPOXIDISED RUBBERSEED OIL

Experimental Techniques and Results  
Formulation of alkyds  
Evaluation of film properties  
Discussion  
Conclusion

#### 30. ALKYDS BASED ON BLOWN KARANJA OIL

Experimental  
Formulation of alkyds  
Discussion



Conclusion

### 31. THE PREVENTION OF GELATION DURING THE MALEINISATION OF DEHYDRATED CASTOR OIL

Experimental

Preparation

Maleinisation

Water solubility

Results and Discussion

Reaction with Acrylonitrile

Reaction with acetic anhydride and phosphorus pentachloride

### 32. UTILIZATION OF NONCONVENTIONAL OILS

Discussion

Conclusion

### 33. CASTOR-UREA RESINOUS OIL

Experimental

Discussion of Results

### 34. PALMDIESEL AS ALTERNATIVE RENEWABLE ENERGY

Chemistry of The Reaction

Laboratory Evaluation of Alkyl Esters as Diesel Substitutes

Stationary Engine test

Preliminary Field Trial

Porim vehicles

Taxis

Exhaustive Field Trial

Pilot Plant

Recovery of Vitamin E & Other Minor Components from Methyl Esters

Future Development

Reduction of pour points of methyl esters

One Step conversion of the process

More uses of Glycerol

Methylesters as kerosene Substitute

Other uses of esters

Conclusion

Inclusion Compounds

Cage (Clathrate) inclusion Compounds

### 35. EXTRACTION OF FATS AND OILS

Preparation of Animal Material

Preparation of Oil Seeds

Heat Treatment of Oil-bearing Materials

Rendering of Animal Fats

Cooking of Oil Seeds

Batch Pressing

Mechanical Expression of Oil

Continuous Pressing

Low-Pressure Pressing

Centrifugal Expression

Solvent Extraction

Application

Recovery of Oil from Fruit Pulps

Extraction of Olive Oil

Extraction of Palm Oil

### 36. REFINING AND BLEACHING

Refining & Bleaching Methods

Effect of Refining & Other Processing Treatment on specific Impurities

Refining Losses

Applications

Desliming or Degumming

Degumming by hydration

Preparation of Commercial Lecithin

Acid Refining

Removal of Break Material by Heat Treatment

Alkali Refining

Reffining with Caustic Soda

Color Standards

Chemical Bleaching

37. HYDROGENATION

Importance of Hydrogenation

Heat of reaction

Diversity of Possible Reactions

Selectivity with Respect to Different classes fo Glycerides

Nickel Alloy or Raney Catalysts

Hydrogenation Equipment

Characteristics of hydrogenated Fats

Hydrogenation of Shortening Stocks

Hydrogenation of Margarine Oils

Hydrogenation of Hard Butter Substitutes

Hydrogenation of Inedible Fats and Fatty Acids

removal of Nickel From hydrogenated oils

Special hydrogenation Processes

Hydrogenation to Produce Fatty Alcohols

Fatty Alcohols by Sodium Reduction

Conjugated Hydrogenation

Hydrogenation of Nitriles to Produce Fatty Amines

Hydrogenation in Solvents

38. DEODORIZATION

Historical

Naturel of Deodorization Process

General Design Features

Batch Deodorization

Continuous Deodorization

39. CUTTING OIL

Manufacture of of Soluble Cutting Oil

Soluble Cutting Oil by Sulphonated Oils

Manufacture of Straight Cutting Oils

Process

40. RICE BRAN OIL

Introduction

Process of Manufacture

41. THE COMPONENT GLYCERIDES OF VEGETABLE FATS

42. MACHINERY & EQUIPMENTS

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