

Handbook on Soaps, Detergents & Acid Slurry (3rd Revised Edition)

Author:- NIIR board

Format: paperback

Code: NI38

Pages: 800

Price: Rs.1575US\$ 150

Publisher: NIIR PROJECT CONSULTANCY SERVICES

Usually ships within 5 days

Novelty in ideas and marketing seems to be the major subject matter of the Indian soap industry. The soaps, detergent and acid slurry product industry are vivacious, varied, creative and tricky, and have the prospective to provide a gratifying career. Soaps and detergents are used frequently in our daily life. We use them to wash our hands and clean our clothes without ever really paying attention to how they work. Beneath the plain white surface of a bar of soap lie an intriguing history and a powerful chemistry. It has been said that amount of soap and detergent consumed in a country is a reliable measure of its civilizations. There was a time when these products were luxury; now it is a necessity. Acid slurry is a sulphonation product made by sulphonation of linear alkyl benzene by oleum or SO_3 or sulphuric acid or combinations of above. It is used in manufacturing of various detergents. The Soap and Detergent industry is profoundly lucrative with splendid market potential as well as bright future scope. In order to meet the requirement of market demand, many more new units are recommended to be established on small and cottage scale. Soaps and detergents are very similar in their chemical properties. However, there is a significant difference between them; soaps are produced from natural products, and detergents are synthetic, or manmade. The market is expected to grow at rates ranging from under 4% to around 4.5%. These are very modest rates considering that the lifestyles not only of urbanites, but even of well off rural folks are changing at a very high pace. The analysts are expecting the industry to continue to grow in both the industrialized as well as developing nations. The present book has been written keeping in view the basic difficulties of the entrepreneurs. Nominal investment is required for this industry which comprises simple method of processing for manufacturing of various types of soaps, detergents and acid slurry. The book contains chapters on: acid slurry, detergent manufacturing, detergents of various types, principal groups of synthetic detergents, inorganic components of detergents, synthesis of detergents, liquid detergents, packaging of soaps and detergent and many more such chapters. The enclosure also contains a list of suppliers of raw material (overseas) and list of plant and machinery suppliers (overseas). Fundamental information in venturing a market and the opportunity and prerequisite of the potential sector has been the superlative way to make a way into a market. How and what if correctly taken care can take you to a long way. The first hand information on different types of soaps, detergent and acid slurry products have been properly dealt in the book and can be very useful for those looking for entrepreneurship opportunity in the said industry.

1. ACID SLURRY

Chemical Name of Acid Slurry

Difference Between Soft and Hard Slurry

Sulphonation of Dodecyl Benzene or Preparation of Acid Slurry
Plant & Machineries Details for Manufacturing Acid Slurry
Raw Materials for Acid Slurry
Process of Manufacture
Manufacturing Steps of Acid Slurry
The Main Advantages Using Oleum
Precautionary Measures for Handling Sulphuric acid and Oleum
Raw Material Requirements
Market Potential

Alpha Olefins

Process of Manufacturing Alpha Olefins

Reactions

2. DETERGENT MANUFACTURING (Comm. Grade)

Other Additives

Procedural details of manufacturing 'Commercial' Detergent Powders

3. DETERGENTS OF VARIOUS TYPES

Detergent Powder

Metal Cleaners

Liquid Detergents

Detergent (Nirma Type)

Detergent Cake

4. PRINCIPAL GROUPS OF SYNTHETIC DETERGENTS

Classification

Anionic Detergents

Cationic Detergents

Non-ionic Detergents

Amphoterics and Zwitterionics

Biodegradability

5. INORGANIC COMPONENTS OF DETERGENTS

Builders and Other Additives

Phosphates

Silicates

Zeolites

Carbonates

Oxygen-releasing Compounds

Sundry Inorganic Builders

6. SYNTHESIS OF DETERGENTS

Raw Materials for Anionic Synthetic Detergents

Alkyl Benzene

Methyl Esters

Sulphonation of Detergent Raw Materials

Sulphonation with SO₃

Sulphonation Processes

Non-ionic Detergents

Cationic Detergents

Amphoteric Detergents

7. MANUFACTURE OF FINISHED DETERGENTS

Powders

Liquid Detergents

Paste Detergents

Solid Detergents

Fabric Softners

Abrasive Cleaners

8. APPLICATION AND FORMULATION OF DETERGENTS

Foam

Household Cleaning

Hard Surface Cleaners

Solvent Detergent

Carpet and Upholstery Cleaners

Textile Dressing

Food and Dairy Industries

Detergent Sanitizers

Metal Cleaners

Miscellaneous Cleaners

9. TECHNOLOGY OF MANUFACTURING SYNTHETIC DETERGENTS

Introduction

Performance Criteria

Formulation Requirements

Approach to Product Formulation

Production of Detergent Active

Sulphonation

Additives to Detergent Actives

Production of Detergent Powder by Dry Mixing

Machine-mixing

Production of Detergent Bars

Liquid Detergents

10. MANUFACTURE OF DETERGENT PRODUCTS

Health and Safety Factors

Production Procedure

Derivation of Linear Alkyl Benzene (LAB)

Derivation of Fatty Alcohols

Process Based on Natural Fats

Process based on Ethylene Source

Sulphonation of Lab with 98 percent Sulphuric Acid

Detergent Powder Prepared Without using Spray Dryer
(High Bulk Density)

11. LIQUID DETERGENTS

Requisites of Surfactants for Formulating Liquid Detergents

Surfactants Most Commonly Used

Builders

Viscosity Controllers

Other Ingredients

Household Liquid Detergents for Laundering

Typical Formulations

A Recommended Formulation

12. PACKAGING OF SOAPS AND DETERGENTS

Introduction

Packaging Material Specifications

Package Testing Methods

Other Tests

Packaged Commodities Rules

13. RAW MATERIALS (OILS AND FATS)

Classification of Fats/Oils

Some of the Most Useful, Fats and Oils

Purification of Soap Fats

Non Fatty Raw Materials for Soap

Other Additives (Foam Producers)

14. MANUFACTURING PROCESS AND FORMULATIONS OF VARIOUS SOAPS

(A) Washing Soaps

(B) Nerol Washing Soap

(C) Toilet Soaps

(D) Carbolic Soaps

(E) Shaving Soaps

(F) Special Soaps

(G) Vaseline Soap

(H) Liquid Soap

(I) Girt Soaps

(J) Depilatory Soaps

(K) Metallic Soaps in Protective Coating Industry

(L) Liquid Dental Soap

(M) Medicated Soap

15. TECHNOLOGY OF SOAP MANUFACTURING

Manufacturing Soap

Glycerine Recovery

Production of Laundry and Toilet Soaps

Production of Filled Soaps on the Mazzoni

Technology of Toilet Soaps

Process Control

Other Soaps

16. TECHNOLOGY OF SOAP MANUFACTURING

Health and Safety Factors

Classification of Soap Products

Methods of Manufacture

Various Finishing Methods

Production

Washing bar/cake soap from neat soap

Semi-boiling process and cold-made process

Production of washing bar/cake soap by semi-boiling/
cold -made process

Toilet soap

Medicated Soaps

Castile Soap by Boiling Process

Various Industrial Soaps

Laundry Washing Aids

More Laundry Wash Mixtures

Shaving Soaps

Shaving Cream

Liquid Soaps/Shampoos

Shampoos

Soap Shampoos

Shampoos Based on Synthetic Surfactants

General formulations

17. SOAP MAKING BY CONTINUOUS PROCESS

(Quicker Methods)

Method of Continuous Saponification of Fats by Alkali Solution.

Continuous Neutralization Process

Continuous neutralization Process Using Fatty Acids Instead of Fats

Batch Methods of Splitting Fats into fatty Acids and Glycerol

Purification of Fatty Acids

18. CLEANSING MECHANISM

Characteristics of Soap

Saponification of Fats - The Basic Chemical Reaction Making Soap

19. DIRECTORY SECTION

List of Suppliers of Raw Material (Indigenous)

List of Plant and Machinery suppliers (Indigenous)

List of Suppliers of Raw Material (Overseas)

List of Plant and Machinery suppliers (Overseas)

About NIIR

NIIR PROJECT CONSULTANCY SERVICES (NPCS) is a reliable name in the industrial world for offering integrated technical consultancy services. NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.

Our various services are: Detailed Project Report, Business Plan for Manufacturing Plant, Start-up Ideas, Business Ideas for Entrepreneurs, Start up Business Opportunities, entrepreneurship projects, Successful Business Plan, Industry Trends, Market Research, Manufacturing Process, Machinery, Raw Materials, project report, Cost and Revenue, Pre-feasibility study for Profitable Manufacturing Business, Project Identification, Project Feasibility and Market Study, Identification of Profitable Industrial Project Opportunities, Business Opportunities, Investment Opportunities for Most Profitable Business in India, Manufacturing Business Ideas, Preparation of Project Profile, Pre-Investment and Pre-Feasibility Study, Market Research Study, Preparation of Techno-Economic Feasibility Report, Identification and Section of Plant, Process, Equipment, General Guidance, Startup Help, Technical and Commercial Counseling for setting up new industrial project and Most Profitable Small Scale Business.

NPCS also publishes various process technology, technical, reference, self employment and startup books, directory, business and industry database, bankable detailed project report, market research report on various industries, small scale industry and profit making business. Besides being used by manufacturers, industrialists and entrepreneurs, our publications are also used by professionals including project engineers, information services bureau, consultants and project consultancy firms as one of the input in their research.

Our Detailed Project report aims at providing all the critical data required by any entrepreneur vying to venture into Project. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line.

NIIR PROJECT CONSULTANCY SERVICES, 106-E, Kamla Nagar, New Delhi-110007, India.

Email: npcs.india@gmail.com Website: NIIR.org

Sat, 03 May 2025 01:08:30 +0000