

Formulation and Manufacturing Process of

Cosmetics with Packaging

(Antiperspirants and Deodorants, Cleansing Creams and Lotions, Emollient Creams and Lotions, Baby Toiletries, Face Powders, Eye Makeup, Aerosol Cosmetics, Hair Straighteners)

Introduction

Indian consumers are becoming more and more knowledgeable about beauty and personal care. The beauty industry in India is growing at a break-neck pace, almost twice as fast as that of the markets in the United States and Europe. Beauty industry in India can be divided into some major segments like baby care, bath and shower, colour cosmetics, deodorants, depilatories, fragrances, hair care, men's grooming, oral care, sets/kits, skin care, and sun care. The number of beauty salons in the country is increasing at a rate of almost 35 percent annually. The prospects of the Indian beauty industry look bright, with the colour cosmetics segment predicted to continue its dominance over the market landscape.

Cosmetic ingredients provide physical and functional properties to personal care products like shampoos, conditioners, creams, lotions and make-up cosmetics. Exponential growth in personal care market in India, coupled with increasing use of natural and multi-functional ingredients in these products, has been driving the country's cosmetic ingredients market. India continues to be one of major target markets for various cosmetic chemical companies due to the country's huge consumer base.

Cosmetic packaging market is a growing sector that has various stake holders such as raw material suppliers, processors, cosmetic and cosmetic packaging manufacturers; with the market for cosmetic products rising, players in cosmetic packaging industry are struggling to diversify their product portfolio.

An efficient and suitable packaging is essential for all types of cosmetics. A number of regulations have also been formulated by the governments on the packaging of cosmetic products owing to the increasing concern of consumers regarding packaging. In addition, the increasing beauty-consciousness and rising disposable incomes amongst people around the world are also fuelling the cosmetic packaging market. The increasing demand for luxurious products is having a positive impact on the market. The cosmetic products market is projected to grow with changing trends in using beauty products and increasing consciousness about appearance.

The types of cosmetic products include fragrances, color cosmetics, bathing shower gels, along with skin care, hair care, personal hygiene oral care, and feminine hygiene products. Growth in the market is anticipated on account of increasing per capita income, rising urban middle-class population and the growing desire among women to look alluring.

India's retail beauty and cosmetics industry, currently estimated at \$950 million, is likely to almost treble to \$2.68 billion by 2020. Annual growth in the Indian beauty and cosmetics markets is estimated to remain in the range of 15-20 per cent in the coming years.

Demand for beauty and personal care products over the forecast will be driven by a number of factors, including rising disposable incomes, increasing product penetration, the growth of modern retailers, increasing awareness of beauty and personal care products, the rising aspirations of consumers, and strong economic growth. As a result, overall beauty and personal care constant value growth over the forecast period is expected to be higher than during the review period.

Some of the fundamentals of the book are regulation of cosmetic products, the relationship of cosmetic products to drugs, preservation of cosmetics, factors affecting preservation, organisms found in cosmetics, antiperspirants and deodorants, cleansing creams and lotions, baby toiletries, face powder manufacturing process, aerosol cosmetics, shaving preparations: soaps, creams, oils, and lotions, advantages and disadvantages of natural dyes, packaging cosmetic preparations, etc.

The book covers formulae, manufacturing processes of various types of cosmetics like antiperspirants and deodorants, cleaning creams, lotions, emollient creams, baby toiletries, face powder, eye makeup and many more along with testing methods. This book will be great asset to new entrepreneurs, existing units, technocrats and technical institutions.

Table of Contents

1. Regulation of Cosmetic Products

Historical Development

Self-regulation

Regulation in the United States

1. Federal Regulation of Cosmetics

2. Cosmetic Composition

3. Cosmetic Labeling

4. The Relationship of Cosmetic Products to Drugs

5. Regulation of Cosmetics by Other Federal Agencies

6. Cosmetics and the Consumer Product Safety Commission

7. Regulation of Cosmetics by the States

8. Conclusion

2. Sensitivity Testing

Diagnostic Sensitivity Testing

Technique of Diagnostic Patch Testing

The Interpretation of Patch Test Reactions

Uncovered versus Covered Patch-Test Technique

Features of Patch Testing with Paraphenylenediamine

Uncovered Patch-Test Method for PPDA Sensitivity

Covered Patch-Test Technique for PPDA Sensitivity

Evaluation of Patch-Test Reactions to PPDA

Features of Patch Testing with Nail Polish

Patch Testing with Lipstick

Testing with Permanent Wave Solutions

Testing for Sensitivity to Perfumes

Testing for Lanolin Sensitivity

Diagnostic Photosensitivity Testing

Light Sources for Photosensitivity Testing

Testing Cosmetics for Photosensitization

Testing Antimicrobial Agents in Soaps and Cosmetics
Patch Test Table for Specific Ingredients in Cosmetics
Patch Tests with Unlisted Cosmetic Ingredients
Prophetic or Predictive Sensitivity Testing
Predictive Testing for Allergic Contact Sensitization
Predictive Testing for Photosensitizing Capacity

3. Quality Assurance

Quality Control

Raw Material Inspection

Inspection of the Finished Product

Inspection of Containers and Packaging Materials

In-Process Control

Finished Goods Control

Good Laboratory Practice (GLP)

Good Manufacturing Practice (GMP)

Environmental Protection

Quality Promotion
Works Proposal System
Quality Teams

4. Raw Materials

Introduction

Basic Surfactants

Alkyl Ether Sulfates

Alkyl Sulfates

α -Olefin Sulfonates

Other Basic Surfactants

Mild Anionic Surfactants

Sulfosuccinates

Cocoyl Isethionates

Acyl Amides

Alkyl Ether Carboxylates

Magnesium Surfactants

Alkyl Ether Carboxylates
Magnesium Surfactants
Alkyl Phosphates
Amphoteric Surfactants
Alkyl Betaines
Alkylamido Betaines
Acylamphoglycinates and Acylamphopropionates
Amine Oxides
Non-ionic Surfactants
Ethoxylates Products
Alkyl Polyglycosides
Cationic Surfactants
Monoalkyl Quaternaries
Dialkyl Quaternaries
Trialkyl Quaternaries
Benzyl Quaternaries
Ester Quaternaries
Ethoxylated Quaternaries

Shampoo and Bath Additives
Thickeners
Foam Stabilizers
Pearlescent Agents
Conditioning Agents
Emollients
Sequestering Agents
Oil Components
Mineral Oil
Natural Oils
Triglycerides
Jojoba Oil
Synthetic Oils
Isopropyl Esters
Ethylhexyl Esters
Oleic Acid Esters
Caprylic / Capric Acid Esters
Isocetyl Stearate

Octyldodecanal
N-Butyl Stearate
Diisopropyl Adipate
Pentaerythritol Tetraisostearate
Waxes
Natural Waxes
Synthetic Waxes
Silicone Oils
Cream Bases
Fatty Alcohols
Polyol Esters
Fatty Acids
Oil-in-Water (O/W) Emulsifiers
Water-in-oil (W/O) Emulsifiers

5. Preservation of Cosmetics

Factors Affecting Preservation

Organisms Found in Cosmetics

Molds

Yeasts

Bacteria

Factors Influencing the Growth of Microorganisms

Minerals

Growth Factors

Moisture Content

pH

Temperature

Oxygen

Other Ingredients

Factors Affecting the Action of Preservatives in Cosmetics

Concentration

Solubility Relationships

pH

Surface-Active Agents

The Interference of Nonionic Emulsifiers with Preservatives

Suitability of Substrate for Growth of Organisms

Amount of Inoculum

Synergism or Antagonism with Other Compounds

Evaluation of Preservatives for Cosmetics

Methods of Testing Antimicrobial Agents

Choice of Organism

Practical Tests

Preservatives

Organic Acids

Alcohols

Aldehydes

Essential Oils

Phenolic Compounds

Esters of p-Hydroxybenzoic Acid

o-Phenylphenol

Mercury Compounds
Surface-Active Agents
Miscellaneous Nitrogen Compounds
Polyols
Miscellaneous Antimicrobials
Mechanism of Preservative Action
Allergic Response to Preservatives and Antimicrobials
Photosensitization
Manufacturing
Prevention of Microbial Contamination
Deionizer Contamination
Filter Contamination
Chelation
Antioxidants
Rancidity
Mechanism of Action
Classification of Antioxidants
Considerations for Use of Antioxidants

6. Antiperspirants and Deodorants

Introduction

Regulations

Mechanism of Sweating

Antiperspirant Active Properties

Basic Aluminum Chloride

Aluminum Zirconium Complexes

Clinical Assessment

Formulatory Considerations

Esthetics

Formulations

Roll-on Products

Stick Products

Spray Products

Deodorants

Odor Control

Clinical Assessment

Formulations

7. Cleansing Creams And Lotions

Properties Sought

History

Types of Cleansing Cream

Beeswax-Borax Emulsion Type

Basic Materials

Liquefying Cleansing Creams

Miscellaneous Emulsion Types

Sorbitan Fatty Acid Ester Emulsions

Acid-Containing Cleansing Creams

Detergent Cleansing Creams

Antibacterial Cleansing Preparations

Cleansing Lotions

Cleansing Preparations for Oily Skin

Consideration of Safety

Equipment and Manufacturing

8. Emollient Creams And Lotions

Theoretical Aspects of Emollience

Emollient Materials

Emollient Evaluation

Emulsion Types

Penetration

Formulations

Emollient Creams

Raw Materials

Glyceryl Monostearate (from Triple-Pressed Stearic Acid)

Polyethylene Glycol Fatty Acid Esters

Stearic Acid

Beeswax

Fatty Alcohols

Lanolin

Hydrocarbon Waxes

Manufacturing Procedure
Emollient Lotions
Specialized Creams and Lotions
Eye Creams
All-Purpose Creams
Therapeutic Creams

9. Baby Toiletries

Epidermal Physiology
Skin Care of the Newborn
Baby Oils
Baby Lotions
Cationic Lotions
Care of the Diaper Area
Diaper Rash
Cationic Ointments

Baby Oils
Baby Lotions
Baby Creams
Soap
Baby Powders
Diaper Laundering
Disposable Diapers
Infantile Eczema
Care of the Hair and Scalp
Formulation
Raw Materials
Baby Oils
Baby Lotions
Baby Creams
Baby Powders
Literature

10. Face Powders

Loose Face Powder

Raw Materials

Formulations

Compact Face Powder

Raw Materials, Binding Agents, and Preservatives

Binding Agents

Compression Methods

Face Powder Manufacturing Process

Base Powder Preparation

Color Extenders

Combination: Base Powder and Color Extenders

Mills

Pressing Machines and Pressure Considerations

Packaging

Quality Control and Laboratory Practices

Shade Control and Lighting

Dispersion of Color

Pay off

Pressure Testing

Breakage Test

11. Eye Makeup

Raw Materials

Pigments

Basic Ingredients

Petrolatum

Lanolin

Ceresin

Carnauba

Beeswax

Stearic Acid

Isopropyl Myristate

Propylene Glycol

Gum Tragacanth

Methyl Cellulose
Preservatives
Pearlessences
Perfuming
Formulation and Manufacture
Eyeshadow
Mascara
Eyebrow Pencils
Eye Liners
False Eyelashes
Eye Cover Products
Eye Makeup Removers
Eye Creams and Eye Sticks
Analysis
General Remarks

12. Aerosol Cosmetics

Definitions

Historical Background

Principle and Mechanism

The Package and its Components

Container

Metals

Industry Specifications for Fabricated Aerosol Cans

Glass

Plastics

Valves

Valve Specialties

Actuator Cover Cap

Powder or Paint Valves

Foam Valves

Spray Anyway Valves

Metering Valves

**Special Applicators
Codispensing Valves
Propellants
Concentrate
Production
Cold Filling
Pressure Filling
Under-the-Cup Filling
Formulation
Hair Products
Hair Sprays
Hairsets and Conditioners
Hairdressing
Color Rinse and Sprays
Wave Lotions
Shampoos
Skin Products
Deodrants and Antiperspirants**

Fragrances
Sunscreen
Shaving Cream
Shaving Accessories
Feminine Deodorant Spray
Nail Preparations
Powders
Face Creams and Lotions
Oral Products

13. Shaving Preparations: Soaps, Creams, Oils, and Lotions

Shaving Soaps, Sticks and Powders

Shaving Soaps

Shaving Sticks

Shaving Powders

Lather Shaving Cream

Brushless Shaving Cream

Shaving Oils and Lotions

14. Preshave and Aftershave Preparations

Presahve Preparations

Skin Conditioners

Beard Softeners

Pre-electric Shave Preparations

Aftershave Preparations

Clear Lotions

Stick Lotions and Gels

Creams and Emulsified Lotions

Powders

Styptics

Aerosols

15. Hair-Grooming Preparations

Properties of a Good Hairdressing

Types of Haridressing

Brilliantines

Liquid Brilliantines

Solid Brilliantines

Alcoholic Lotions

Hair Tonics

Two-Layer Lotions

Gum-Base Hairdressings

Oil-in-Water Emulsions

Water-in-Oil Emulsions

Aerosol Hairdressings

16. Hair Straighteners

Morphological Considerations

General Chemical Composition

Keratin

Hair Treatment Reactions

Oxidation

Diffusion of Reagents

D-Cystine Fraction

Measurement of Physical Changes Related to Fibre Treatment

Form-related Compositions

Temporary Straightening

Permanent Straightening

Thioglycolate Compositions

Neutralizers

Manufacturing and Material Specifications

Packaging Considerations

Method of Application

Other Materials

Silicones

Sulfites

Manufacture

Procedure

Neutralization

General Considerations

17. Bleaches, Hair Colorings and Dye Removers

Demands in Hair Coloring

Classes of Coloring Agents

Bleaching Agents

Early Bleaches

Chemical Bleaches

Hydrogen Peroxide

Action of Peroxide on Hair

Bleaching Agents and Treatments

Platinum Bleaching

Blanching of Hair

After Treatment of Bleached Hair

Synthetic Organic Dyes

Range of Shades Required

Special Shades

Temporary Colorings

Coloured Rinses

Rinses for Gray Hair
Importances of Instructions
Color Shampoos
Powders
Crayons
Semi-Permanent Dyes
Nitro Dyes
Self-Oxidizing Dyes
Solvent-Assisted Dyes
Anion-Cation Complexes
Reactive Dyes
Aminoanthraquinone Dyes
Permanent Dyes
(Oxidation Dyes)
Pyrogallol
Introduction of Amino Dyes
Early Commercial Development

Quest for Substitutes; Protective Measures
Research for Improved Products and Processes
Advantages and Disadvantages of Oxidation Dyes
Composition of Modern Oxidation Dyes
Forms of Oxidation Dyes
Regulations Governing Amino Dyes
Research for New Days
Plant Derivatives
Henna
Indigo
Camomile
Wood Extracts
Mixed Wood Dyes
Miscellaneous Plant Products
Use of Mordants
Advantages and Disadvantages of Natural Dyes
Metallic Dyes
Lead Dyes

Silver Dyes

Dyes for Eyebrows and Eyelashes

Copper Dyes

Compound Hennas

Miscellaneous Metallic Dyes

Advantages and Disadvantages of Metallic Dyes

Toxicity of Metallic Hair Dyes

18. Packaging Cosmetic Preparations

Packaging Requirements and Functions

Packaging Materials and Containers

Tins and Jars

Bottles and Flacons

Tubes

Stick Applicators

Spray Cans

Decoration of Cosmetics Packaging

Future Ecological and Economic Challenges

Niir Project Consultancy Services (NPCS)
can provide Process Technology Book on
Cosmetics
(Processes, Formulae with Testing Methods)

See more

<https://goo.gl/F3g8J9>

<https://goo.gl/rkg95P>

<https://goo.gl/w68h3b>

Visit us at

www.entrepreneurindia.co



**Take a look at NIIR PROJECT
CONSULTANCY SERVICES on
#StreetView**

<https://goo.gl/VstWkd>

Locate us on Google Maps

<https://goo.gl/maps/BKkUtq9gevT2>

Contact us

Niir Project Consultancy Services

106-E, Kamla Nagar, Opp. Spark Mall,

New Delhi-110007, India.

Email: npcs.ei@gmail.com , info@entrepreneurindia.co

Tel: +91-11-23843955, 23845654, 23845886, 8800733955

Mobile: +91-9811043595

Fax: +91-11-23841561

Website : www.entrepreneurindia.co , www.niir.org

Take a look at NIIR PROJECT CONSULTANCY SERVICES on

#StreetView

<https://goo.gl/VstWkd>



Niir PROJECT CONSULTANCY SERVICES

An ISO 9001:2008 Company

Who are we?

- *One of the leading reliable names in industrial world for providing the most comprehensive technical consulting services*
- *We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients' in India & abroad*

We at NPCS want to grow with you by providing solutions scale to suit your new operations and help you reduce risk and give a high return on application investments. We have successfully achieved top-notch quality standards with a high level of customer appreciation resulting in long lasting relation and large amount of referral work through technological breakthrough and innovative concepts. A large number of our Indian, Overseas and NRI Clients have appreciated our expertise for excellence which speaks volumes about our commitment and dedication to every client's success.



We bring deep, functional expertise, but are known for our holistic perspective: we capture value across boundaries and between the silos of any organization. We have proven a multiplier effect from optimizing the sum of the parts, not just the individual pieces. We actively encourage a culture of innovation, which facilitates the development of new technologies and ensures a high quality product.



What do we offer?

- *Project Identification*
- *Detailed Project Reports/Pre-feasibility Reports*
- *Business Plan*
- *Industry Trends*
- *Market Research Reports*
- *Technology Books and Directory*
- *Databases on CD-ROM*
- *Laboratory Testing Services*
- *Turnkey Project Consultancy/Solutions*
- *Entrepreneur India (An Industrial Monthly Journal)*

How are we different ?

- *We have two decades long experience in project consultancy and market research field*
- *We empower our customers with the prerequisite know-how to take sound business decisions*
- *We help catalyze business growth by providing distinctive and profound market analysis*
- *We serve a wide array of customers , from individual entrepreneurs to Corporations and Foreign Investors*
- *We use authentic & reliable sources to ensure business precision*

Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation

Who do we serve?

- *Public-sector Companies*
- *Corporates*
- *Government Undertakings*
- *Individual Entrepreneurs*
- *NRI's*
- *Foreign Investors*
- *Non-profit Organizations, NBFC's*
- *Educational Institutions*
- *Embassies & Consulates*
- *Consultancies*
- *Industry / trade associations*

Sectors We Cover

- *Ayurvedic And Herbal Medicines, Herbal Cosmetics*
- *Alcoholic And Non Alcoholic Beverages, Drinks*
- *Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin*
- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*

Sectors We Cover Cont...

- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
- *Cereal Processing*
- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*

Sectors We Cover Cont...

- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

Sectors We Cover Cont...

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha (Biofuel)*
- *Hotel & Hospitality Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

Sectors We Cover Cont...

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*

Sectors We Cover Cont...

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*

Sectors We Cover Cont...

- *Potato And Potato Based Projects*
- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

Sectors We Cover Cont...

- *Township & Residential Complex*
- *Textiles And Readymade Garments*
- *Waste Management & Recycling*
- *Wood & Wood Products*
- *Water Industry(Packaged Drinking Water & Mineral Water)*
- *Wire & Cable*

Contact us

Niir Project Consultancy Services

106-E, Kamla Nagar, Opp. Spark Mall,

New Delhi-110007, India.

Email: npcs.ei@gmail.com , info@entrepreneurindia.co

Tel: +91-11-23843955, 23845654, 23845886, 8800733955

Mobile: +91-9811043595

Fax: +91-11-23841561

Website : www.entrepreneurindia.co , www.niir.org

Take a look at NIIR PROJECT CONSULTANCY SERVICES on

#StreetView

<https://goo.gl/VstWkd>



Follow Us



➤ <https://www.linkedin.com/company/niir-project-consultancy-services>



➤ <https://www.facebook.com/NIIR.ORG>



➤ <https://www.youtube.com/user/NIIRproject>



➤ <https://plus.google.com/+EntrepreneurIndiaNewDelhi>



➤ https://twitter.com/npcs_in



➤ <https://www.pinterest.com/npcsindia/>



THANK YOU!!!

For more information, visit us at:

www.entrepreneurindia.co