

Herbal Soaps & Detergents Handbook

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About the Book

The use of herbs for medicinal and cosmetic purpose goes back to the ancient times. The emphasis at the present hour has been laid on the spectacular growth of the herbal and ayurvedic products. The demand in past is found to have increased with increase in number of middle class population. People are now a days very much aware of the ingredients in cosmetic products, the benefits of plant products and the harmful effects of chemical ingredients. The presence of artificial and chemical ingredients in cosmetic products has made people to rethink about suitable alternatives to suit their personnel care regime. The herbal products have finally made their appearance in packaged form in the domestic markets, as cosmetics and personal care preparation such as soaps, shampoos, detergent bars, liquid soaps, liquid detergents, etc. These products play a vital role in our sense of well being and quality of life. The herbal soaps and detergents directly influence our emotions and can trigger moods. These creations not only protect the skin from harmful sun radiations but also leave behind a pleasant fragrance. Due to the increasing awareness and importance of cleanliness and healthiness, the use of herbal products is also increasing. Future demand for herbal products depends upon the per capita rate of consumption and segment of population using these products.

This handbook provides detailed information on the manufacturing process of herbal soaps and detergents. This book contains numerous formulae, manufacturing process of different type of soaps and detergents which are used in day to day life. The book is an unique compilation and will be very helpful to all its readers, new entrepreneurs, professionals, beauty care product manufacturers, existing units, technical institutions, etc.

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Chemicals and Fixatives

Isolates

Synthetic Odourous Chemicals

Fixatives

Raw Materials : Herbal Products

Acacia arabica

A. indica Benth

Parts Used : Bark, gum, leaves, seeds, pods.

Acalypha Indica

(N.O. - Euphorbiaceae)

ANDROPOGON MURICATUS. Retz. or A. Squarrosus

Angelica (Angelica archangelica)

Anise (Pimpinella anisum)

Associated Oil

AZADIRACHTA INDICA

Basil (Ocimum basilicum)

BALSAMODENDRON MUKUL, HOOK. or B. agollocha

Parts Used - Gum

BALSAMODENDRON MYRRHA

(N.O. Burseraceae)

Parts Used : Gum from the bark of the tree

Bay (*Laurus nobilis*)

Associated Oils

Benzoin (*Styrax benzoin*)

Associated Oils

Bergamot (*Citrus bergamia*)

Birch (*Betula lenta*)

Associated Oils

Calendula (*Calendula Officinalis*)

Associated Oil

Caraway (*Carum carvi*)

Cardamom (*Elettaria cardamomum*)

CITRUS MEDICA, Linn

(N.O.—Rutaceae)

Carrot Seed (*Daucus carota*)

Caulophyllum Inophyllum

Cedarwood (*Cedrus species*)

Cinnamon (*Cinnamomum zeylanicum*)

Associated Oils

Clary Sage (*Salvia sclarea*)

Associated Oils

Celery (*Apium graveolens*)

Chamomile, German

(*Matricaria recutita*, formerly *M. chamomilla*)

Associated Oils

Coriander (*Coriandrum sativum*)

Curculigo orchiodes Gaertn

(N.O.—Amaryllidaceae)

Ayurvedic Properties

CURCUMA LONGA, Linn

(N.O.—Scitaminaceae)

Associated Oil

Cypress (*Cupressus sempervirens*)

Eucalyptus (*Eucalyptus globulus*)

Associated Oils

Fennel (*Foeniculum vulgare*)

Associated Oil

Fir (*Abies alba* and other species)

Associated Oils

Associated Oils

FICUS RELIGIOSA LINN

(N.O. Moraceae)

Parts Used : Bark, Fruit, Root

Ayurvedic Properties

Galbanum (*Ferula galbaniflua*)

Associated Oils

Geranium (*Pelargonium graveolens*)

Associated Oil

Ginger (*Zingiber officinale*)

Associated Oil

Helichrysum (*Helichrysum angustifolium*)

Hyssop (*Hyssopus officinalis*)
Associated Oil
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Associated Oil
HEMIDESMUS INDICUS, R. BR.,
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Jasmine
(*Jasminum officinale* and *J. grandiflorum*)
Associated Oil
Juniper (*Juniperus communis*)
Associated Oils
Labdanum (*Cistus labdaniferus*)
Associated Oils
Lavender (*Lavandula angustifolia*, previously *L. vera* and *L. Officinale*)
Associated Oils
Lemon (*Citrus limon*)
Associated Oil
Associated Oils
Lemongrass Cochin (*C. flexuosus*)
Grown in India primarily for isolation of citral
Lovage (*Levisticum officinale*)
Marjoram
(*Origanum marjorana* or *Marjorana hortensis*)
Associated Oils
Melissa (*Melissa Officinalis*)
Associated Oil
Mimosa (*Acacia decurrens* var. *dealbata*)
Associated Oil
Myrrh (*Commiphora myrrha*)
Associated Oils
Myrtle (*Myrtus communis*)
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(N.O. Papilionaceae, Fabaceae)
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Ayurvedic Properties
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Rose (*Rosa damascena*, *R. gallica*, and others)

Associated Oils

Rosemary (*Rosmarinus officinalis*)

Associated Oils

Rosewood (*Aniba rosaeodora*)

Sage (*Salvia officinalis*)

Sandalwood (*Santalum album*)

Associated Oil

Spikenard (*Nardostachys jatamansi*)

Associated Oils

SMILAX CHINA

(N.O. - Liliaceae)

TERMINALIA CHEBULA RETZ.

(N.O. Combretaceae)

Parts Used : Fruit

Ayurvedic Properties

TERMINALIA BELERICA ROXB

(N.O. Combretaceae)

Parts Used : Fruit (unripe and ripe)

Ayurvedic Properties

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Cough

Stomach Disorders

Sore Throat

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Eye Disorders

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Tea Tree (*Melaleuca alternifolia*)

Associated Oils

Thyme (*Thymus vulgaris*)

Associated Oils

Thymus vulgaris has many chemotypes

Tuberose (*Polianthes tuberosa*)

Vanilla (*Vanilla planifolia*)

Vetiver (*Vetiveria zizanoides*)

Violet (*Viola odorata*)

Associated Oil

Yarrow (*Achillea millefolium*)

Ylang-Ylang (*Cananga odorata*)

Associated Oils

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Perfumes as formulated below
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Perfume Mixture
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Perfume Mixture
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Perfume Mixture
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HERBAL TOILET SOAPS

To Prevent Pimples

To Fight Dandruff

To Kill Germs

To Prevent Prickly Heat

HERBAL SHAMPOOS

Lime Shampoo

Lavender Shampoo

Methi-Shikakai Shampoo

Sandalwood Shampoo

Neem Shampoo

Hair Rinses

Apple Hair Rinse

Barley Hair Rinse

Chamomile Hair Rinse

Rosemary-Chamomile Hair Rinse

Rosemary Hair Rinse

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Anti-Dandruff Sesame Preparation
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General Purpose Powder
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Heavy-duty Detergent Powder
Light-duty Detergent Powder
General Formula for Detergent Powders
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Medium-foam Detergent Powder
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Industrial Sanitary Cleaner
General Cleaning Compound
Dishwashing Compound
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Active detergent

Sodium tripolyphosphate

Talc

Starch

China clay

Calcite

Soda ash

Sodium sulphate

Sodium silicate

Coconut mono ethanolamide

Soapstock

Dicalcium phosphate

Rosin

Titanium dioxide

Colour

Fluorescer

Perfume

Water

Processing of NSD Bars

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Formulations for detergent bar manufacture

Plant & Machinery for Small Scale Detergent

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Kneader

Milling Machine

Plodder

Bar Cutter or Billet Cutter

Embossing or Stamping Machine

Pulverizer

Formulations of Detergent Cakes

Soap-Surfactant Combination

Detergent Bar

Low-soap Syndet Bar

Soap-Synthetic All-purpose Bar

All Syndet Bar

Alkyl-Sulfate Syndet Bar

Proctor & Gamble's Soap Syndet Formulation

Proctor and Gabmle's Syndet Laundry Bar

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Projecting Cost
Plant and Machinery
Monthly requirements of Raw Materials, Utilities and Factory
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Total Capital Investment
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Textile Degumming Detergent Paste
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Total Capital Investment
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Cost of Production (Monthly basis)
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Apparent density, $g/ml = 40/V$
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Particle Size of Powdered Detergents
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Pour Foam Test
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Cationics

Non-ionics

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Procedure

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Procedure

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Procedure

Procedure

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Procedure

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Procedure

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Apple
Apricot (Khubani)
Banana
Barley
Carrot
Castor Oil
Clove
Cucumber
Dhania
Egg
Honey
Lavender
Lemon
Orange
Palak
Peach
Potato
Pudina
Rose
Sage
Salt

Saunf
Tea
Thyme
Tomato
Yoghurt

Sulfonated Oils
Historical Background
Chemistry of Sulfation and Sulfonation
Applications of Sulfonated Oils
MANUFACTURE OF SULFONATED OILS
Sulfation
Sulfonation
SULFATION OF INDIVIDUAL OILS
Characteristics and Analysis of Sulfonated/Sulfated Oils

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