

Herbal Cosmetics

The word cosmetic was derived from the Greek word "kosm tikos" meaning having the power, arrange, skill in decorating.

Using various permissible cosmetic ingredients to form the base in which one or more herbal ingredients are used to provide defined cosmetic benefits only, shall be called as "Herbal Cosmetics".

Herbal Cosmetic

Drug and Cosmetic Act, 1940:



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"Any Article or preparation intended to rubbed, poured, sprinkled or sprayed on or introduced to or applied to any part of human body for cleaning, perfuming, beautifying, promoting, attractiveness or altering the appearance and includes any article intended for use as component of cosmetics.



Cosmetic used to perform the following actions

- To clean
- To perfume
- To change the appearance
- To protect
- To keep in good condition
- To correct the body odor etc.

And field of application of cosmetic remains to the epidermis, hair system, nails, lips, teeth & mucous membrane of oral cavity

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Natural and Synthetic

The use of natural ingredients in personal and health care product has been practiced since time immemorial leading to increased use of herb with a curative value. Modern research proves that herbs while being effective are also mild and soothing. Potent synthetic preparation and chemicals, though effective, constitute a toxic burden to human body.

“As the science advances, man made his life easy. Despite its harmful effect on long term usage. As he started realizing serious effect of these he looked back into the olden life style. So the ultimate example for this is Ayurveda / Herbal Usage”.

Cosmeceuticals

Cosmeceuticals is the fastest growing segment of the personal care products, these are cosmetic products which contain biologically active principles or ingredients of plant origin.

There is an increased demand for the use of natural substances in cosmetics in recent years due to their mild action and non toxic in nature, in many cases they are found to be quite effective.

Cosmetic Phytognosy

Which deals with biochemical and physicochemical properties of plant derived ingredients to be used in cosmetics.

Basically six different types of plant derived ingredients are used in herbal cosmetics.

Types of plant derived ingredients are used in herbal cosmetics.





Note:

Cosmetic Phytognosy is a new terminology for the science of functional plant derived cosmetic ingredients.

Types of herbal cosmetics

Skin Care

Skin Cleanser

Moisturizers

Nourishers

Antiseptics

Soothing agents

Sunscreens

Antiwrinkle

Anti Acne

Hair Care

Detergents

Conditioners

Nourishers

Hair Colorant

Hair growth promoter

Anti dandruff

Others

Colors

perfumes

Talcum Powder

Oral care products

a) Skin care products

Skin is constantly exposed to dirt, microbes, irritants, radiations and toxins which can affect the skin in many ways.

Hence to protect the skin, cleanse it and restore the tone, soothen it and prevent tanning, wrinkle and scar formation, various preparations are used which are enlisted

Skin cleansers: Eg: milk, cucumber, citrus peels, aloe.

Moisturizers: Eg: aloe-vera, almond oil, rose.

Nourishers: Eg: honey, carrot peach wheat germ oil.

Antiseptics: Eg: neem, turmeric, tulsi, lavender oil.

Soothing agents (Emmolients) : Eg: sesame oil, almond oil, aloe-vera.

Sunscreens: Eg: aloe-vera, chamomile, calendula, cucumber.

Antiwrinkle & anti aging: Eg: peach, liquorice, papaya, aloe-vera, apricot, turmeric.

Anti acne: Eg: cucumber gel, vetiver.

b) Hair care products

Hair complexion, colour and style play an important role in people's physical appearance. Hair care preparations are applied topically to the scalp and hair. These contain ingredients which either clean, condition or nourish the hair or prevent dandruff formation.

The following are the various hair care preparations.

Detergents: Eg: soap nut, shikekai, reetha.

Conditioners: Eg: henna, amla, hibiscus, rosemary, tea.

Nourishers: Eg: brahmi, bringraj, eggs, coconut oil, sesame oil.

Hair colorants: Eg: henna.

Hair growth promoters: Eg: brahmi, amla, hibiscus, coconut oil, sesame oil.

Anti dandruff: Eg: soap nut, shikekai, lemon, thyme, aloe vera.

c) Other cosmetic

These are used to prepare various cosmetic products like lipsticks, nail polishes, eye products.

Eg: anthocyanins, saffron, turmeric, carotenoids, indigo, capsicum, chlorophyll.

Perfumes : Eg: volatile oils of plants like rose, lavender, jasmine, sandalwood.

Talcum powders : It contains talc with added plant extracts to impart the desired flavour and odours.

Eg: sandalwood, rose, jasmine, lavender, etc.

Oral care (Hygiene) products

Oral care products like tooth pastes, powders, mouth washes, mouth fresheners, etc.

Various herbs and their extracts are incorporated into these preparations in order to achieve antimicrobial, antiseptic, antiplaque, anti-inflammatory and mouth freshening properties.

Eg: neem, mentha, chamomile, sage, myrrh, nutmeg, chitosan, calendula, rosemary, etc.



Study of drugs used in cosmetics

1) Soapnut (Ruth)

It consists of pods of *Sapindus trifoliatus*, *Sapindus mukorassi*. Family: Sapindaceae.

Description:

It is a shrub with linear pods, the dried powder of the pods is brown in colour and have soap like properties.

C. C.: It contains saponins (10-11.5), mucilage, gums, proteins. Saponins contain sapindosides A, B, C and D, diosgenin, gitogenin, chlorogenin and rusogenin.

Uses : It is used as detergent, hair cleanser, hair growth promoter and antidandruff agent.

2) Amla (Indian gooseberry)

It consists of dried and fresh fruits of *Phyllanthus emblica*. Family: Phyllanthaceae.

Description : It is a small tree with a number of globular fruits which are yellowish green in colour. They have a sour and astringent taste.

C. C. : It is a rich source of ascorbic acid (Vitamin C), other constituents include tannins, minerals such as iron, calcium, phosphorous. It is also rich in pectin.

Uses : Amla is used as a hair growth promoter, hair nourisher, hair conditioner and colourant.

3) Henna (Mehendi)

It consists of fresh and dried leaves of *Lawsonia inermis*,

Family: Lythraceae.

Description : It is a flowering plant and its leaves are used to colour and decorate the skin and hair.

C. C.: Henna contains a soluble component known as lawsone. It is responsible for the colour. It also contains xanthenes, tannins, flavonoids and coumarins.

Uses: Henna is used as hair colorant, hair dye, hair conditioner and nourisher. It produces a cooling effect on the skin. It is also used to treat burns and wounds.

4) Hibiscus (Jaswandi)

It consists of dried flowers and leaves of *Hibiscus rosasinensis*, Family: *Malvaceae*.

Description : Red and white varieties are generally used in hair care preparations.

C. C.: It contains Vitamins, flavonoids, anthocyanins, quercetin, mucilage and albumin.

Uses : It is used as hair growth promoter, anti greying agent, hair conditioner, hair rinser. It gives smoothness and shine to the hair.

5) Tea (Chai)

It consists of dried leaves of *Thea sinensis* and *Camellia sinensis*, **Family: Theaceae.**

Description: The leaves are collected, dried and made into the form of tea dust.

C. C.: Tea contains polyphenols, catechin, epicatechin, caffeine, theophylline, theobromine.

Uses: It is used as hair conditioner, colorant. It gives smoothness and shine to hair.

6) Aloe (Kumari)

It consists of dried or fresh mucilage of Aloe vera

Family: Liliaceae,

C. C.: It contains anthraquinones like rhein, aloin, emodin, minerals and mucilage. Chemically mucilage is a polysaccharide consisting of salts of poly uronic acids.

Uses: Aloe has good wound healing properties. It is used in skin care and hair care cosmetics, it is used to treat radiation burns, it is also used as a hair conditioner and nourisher. Aloe is used as an ingredient in various sunscreen c and skin moisturizer creams.

7) Liquorice (*Glycyrrhiza*)

It consists of dried roots and stolons of

Glycyrrhiza glabra, Family: Leguminosae.

C.C.: Liquorice contains saponin glycosides, glycyrrhizin. It also contains flavonoids, liquiritin and isoliquiritin.

Uses: The ammonium and sodium salts of glycyrrhizinic acid are widely used in cosmetics.

It has skin improving properties hence used in skin care cosmetics.

8) Turmeric (*Curcuma*)

It consists of dried and fresh rhizomes of

Curcuma longa, Family: Zingiberaceae.

C.C. : It contains volatile oils, resins, curcuminoids like curcumins.

Uses: Antiseptic and anti-inflammatory, skin conditioning and antioxidant properties, it is used in skin care cosmetics. It is also used as a colouring agent, antimicrobial and wound healing agent. It is incorporated in ointments & creams.

9) Sandalwood

It consists of heart wood of *Santalum album*,

Family: Santalaceae.

Description: The wood is obtained from main stem and branches. It is collected from adult 25 years old trees.

C.C.: It contains volatile oils, which contain 95% of two isomeric sesquiterpene alcohols namely a alpha and beta-santalol. It also contains santalal, santene, santanone, santalone and santalene.

Uses : Sandalwood is used in perfumery, as skin conditioner, in creams, lotions, soaps and powders.

10) Bhringraj

It consists of the entire herb of *Eclipta alba*,

Family: *Asteraceae*.

C.C.: It contains alkaloids ecliptine, amyrrin, wedelolactone, wedelic acid and luteolin.

Uses: Anti inflammatory. It improves the skin complexion. It is also used as a dentifrice

11) Sesame oil

It is a fixed oil obtained from *Sesamum indicum*,

Family: *Pedaliaceae*.

C.C.: It contains glycerides of fatty acids, mainly oleic, linoleic, palmitic, stearic and arachidic acids. It also contains phenol, sesamol.

Uses: It is used as a nutritive, softening agent (emollient), used in the manufacture of soaps, ointments and pastes.

12) Bees wax

It is the purified wax obtained from honey comb of bees *Apis mellifera*. Family: *Apidae*.

C.C.: It contains esters of monohydric alcohols, myricin, myricyl palmitate, cerotic acid, mellisic acid and an aromatic substance cerolein.

Uses: It is used in the preparation of ointments, plasters, cosmetic, creams and lipsticks.