



## HERBAL COSMETICS

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### ABSTRACT

An natural beauty have developing call for within side the international marketplace and is a useful present of nature. Herbal formulations usually have attracted full-size interest due to their properly hobby and relatively lesser or nil aspect consequences with artificial drugs. Herbs and spices had been utilized in retaining and improving the human splendor. Indian ladies have lengthy used herbs along with Sandalwood and Turmeric for pores and skin care, Henna to shadeation the hair, arms and soles; and herbal oils to fragrance their bodies. Not too lengthy ago, complex natural splendor remedies had been accomplished within side the royal palaces of India to intensify sensual enchantment and preserve standard hygiene. The natural cosmetics synthetic and used normally for every day reason encompass natural face wash, natural conditioner, natural soap, natural shampoo etc. The enterprise is now focusing at the developing phase with a good sized scope of manifold enlargement in coming years. Herbal cosmetics are described because the splendor merchandise which posses suited physiological hobby along with healing, smoothing appearance, improving and conditioning homes due to natural ingredients.

**KEYWORDS:-**Herbal cosmetics, Skin Care, Hair Care, Anti-inflammatory, Antioxidants, Antibacterial, Indian Standards Guidelines, Evaluation of the finished products of herbal cosmetics.

### INTRODUCTION:-

The phrase beauty became derived from the Greek phrase “kosm tikos” which means having the power, arrange, ability in decorating. <sup>[1]</sup> The starting place of cosmetics paperwork a non-stop narrative for the duration of the records of guy as they developed. The guy in prehistoric instances 3000BC used colorings for adornment to draw the animals that he needed to seek and additionally the person survived assault from the enemy with the aid of using colouring his pores and skin and embellished his frame for safety to initiate worry in an enemy (whether or not guy or animal) <sup>[2]</sup>. The starting place of cosmetics had been related to hunting, fighting, faith and superstition and later related to remedy Herbal Cosmetics, right here in after referred as Products, are formulated, the use of diverse permissible beauty substances to shape the bottom wherein one or extraneous substances are used to offer described beauty advantages only, will be referred to as “Herbal Cosmetics”. <sup>[3]</sup>

Beginning 1990's beauty producer tailored a term 'cosmeceuticals' to explain the OTC pores and skin care merchandise that says healing advantage through addition of plant primarily based totally energetic component together with alpha- hydroxy acid, retinoic acid, ascorbic acid and coenzyme. <sup>[4]</sup> These energetic components serves many functions viz. boom in pores and skin elasticity postpone in pores and skin age through decreasing the wrinkles, safety towards UV radiation through antioxidant assets and to test degradation of collagen respectively. <sup>[5]</sup> The pores and skin and hair splendor of people relies upon at the health, habits, habitual job,

climatic situations and maintenance. <sup>[6]</sup> The pores and skin because of moderate publicity to warmth will dehydrate at some stage in summer time season and reasons wrinkle, freckles, blemishes, pigmentation and sunburns. The intense iciness motive damages to the pores and skin within side the shape of cracks, cuts, maceration and infections. The pores and skin sicknesses are not unusual place amongst all age businesses and may be because of publicity in the direction of microbes, chemical agents, organic toxin gift within side the environment, and additionally to a few expand because of malnutrition. <sup>[7]</sup> The best aspect they needed to depend on turned into the information of nature compiled within side the ayurveda. The technology of ayurveda had applied many herbs and floras to make cosmetics for beautification and safety from outside affects. The herbal content material within side the botanicals does now no longer motive any facet results at the human frames; alternatively enhance the frame with vitamins and different beneficial minerals. <sup>[8]</sup> The cosmetics, in keeping with the Drugs and Cosmetics Act is described as articles meant to be rubbed, poured, sprinkled or sprayed on, added into or in any other case implemented to the human frame or any element thereof for cleansing, beautifying, selling beauty or changing the appearance. The beauty does now no longer come below the preview of drug license. The natural cosmetics are the arrangements containing phytochemical from a whole lot of botanical sources, which affects the capabilities of pores and skin and offer vitamins important for the healthful pores and skin or hair. <sup>[9]</sup> The herbal herbs and their merchandise while used for his or her fragrance in beauty instruction are termed as natural cosmetics. There is not unusual place perception that chemical primarily based totally cosmetics are dangerous to the pores and skin and an improved consciousness amongst customers for natural merchandise caused the call for herbal merchandise and herbal extracts in cosmetics arrangements. <sup>[10]</sup> The improved call for the herbal product has created new avenues in cosmeceutical market. The Drug and Cosmetics Act specify that herbs and vital oils utilized in cosmetics ought to now no longer declare to penetrate past the floor layers of the pores and skin nor must have any healing effect. The criminal requirement and the regulatory approaches for natural cosmetics are identical as that for different chemical components utilized in beauty formulations. <sup>[11]</sup>

## HERBAL COSMETICS AS A FAVOURABLE CHOICE

In the contemporary-day era, natural cosmetics were in fashion due to the upward push within side the splendor and style industry. Mostly women, the call for herbal components have multiplied than chemical formulations for the enrichment of splendor. Moreover, those formulations enhance fitness and decrease the side-outcome springing up from the chemical components <sup>[17]</sup> Natural/Herbal cosmetics are favored over the artificial ones due to many motives as said below. Natural cosmetics because the call shows are derived from the plant origin, unfastened from any poisonous outcomes. Example Coconut Oil, Aloe Vera Gel. Aloe Vera gel is acquired from Aloe species belonging to the Liliaceae family. <sup>[18]</sup>

**a) Compatibility with pores and skin types:** Herbal Cosmetics are satisfactory appropriate for nearly all sorts of pores and skin. They offer suitable pores and skin blessings regardless of pores and skins had eaten and pores and skin tone. They also are satisfactory appropriate for the dry, touchy and oily pores and skin. Natural cosmetics additionally save you the degradation of the pores and skin. <sup>[20]</sup>

**b) Efficacy and extraprotection:** Comparable to artificial cosmetics, herbal ones are more secure to use. Clinically examined through the dermatologists, they may be used anytime. For example the artificial chemical along with Butylated Hydroxy Anisole (BHA) a not unusual place antioxidant that is stated to a carcinogenic and allergy to the body. <sup>[21]</sup>

**c) Greater range for selection:** Herbal cosmetics or this area includes big diversification of herbs and plant materials. Variety of natural components and natural formulations are available. For example, numerous formulations of eye shadows, mascara, creams, basis is available. Various examples encompass Salai Guggal-Boswelliaserrata, Shatawari- Asparagus racemosus. <sup>[22]</sup>

**d) No Need for animal trying out:** As compared to artificial cosmetics, the want for animal trying out on natural merchandise or system is least. These cosmetics are examined within side the lab situation the use of numerous sorts of equipment. This approach no animals are harmed for the duration of the trying out of protection and efficacy. <sup>[23]</sup>

**e) Budget-pleasant:** Herbal cosmetics are an awful lot greater price pleasant than artificial cosmetics. Because in their extrarangeround and clean availability, the relative price is relatively low. These herbal cosmetics, due to the friendliness within side the price, is favored through 80% of the populace across the globe. <sup>[25]</sup> Marketed formulations of natural cosmetics. <sup>[24]</sup>

## CLASSIFICATION OF HERBAL COSMETICS <sup>[26]</sup>

### 1 According to region where it is used

- skin: Powder, lipsticks, rouges, creams, lotion, solution,
- Hair: Shampoos, conditioners, creams, bleaches, colouring preparation,
- Nails: Nail-lacquers, lacquer removers
- Teeth: Pastes, powders, gels, dentifrices
- Eye: Eyeliners, mascaras, eye shadows and eyebrow pencils

### 2 According to the function of cosmetic preparation:

- Emollient: cold cream, vanishing creams, foundation creams, lotion, solution.

- b) Cleansing: cream shampoo and rinsers etc.
- c) Decorative preparation: lipsticks, rouges, eyeliners, lacquers, and dressing preparation.
- d) Deodorant and antiperspirants: Sprays, sticks and mouthwashes.
- e) Protective preparation: creams and powders.

### 3 According to composition of cosmetics

- a) Lotion
- b) Powder
- c) Emulsion
- d) Solution
- e) Suspension
- f) Creams
- g) Pastes
- h) Gels
- i) Aerosols
- j) Sticks
- k) Pencils

#### ADVANTAGES:

- a) They do now no longer initiate allergic reaction & do now no longer have bad aspect effects.
- b) They are effortlessly integrated with pores and skin and hair.
- c) With small amount they're very powerful compared to artificial cosmetics.
- d) Extracts of plant decreases the majority belongings of cosmetics and offers suitable pharmacological effects.
- e) Easily available & determined in massive variety & amount.
- f) Easy to manufacture and leader in cost.

#### DISADVANTAGES:

- a) Herbal pills have slower consequences as evaluate to Allopathic dosage form. Also it calls for long time therapy.
- b) They are thought to cover flavor and odor.
- c) Most of the natural pills aren't without difficulty available.
- d) Manufacturing procedure is time eating and complicated. No pharmacopoeia defines any particular method or components for use in any of natural cosmetics.

**TABLE NO.1:- Comparisons Between Herbal, Ayurvedic, Natural and Organic Products.**

Herbal	Ayurveda	Natural	Organic
Herbal products are composed with the extracts from plants, leaves and flowers, etc.	These products are formulated using various indigenous herbs and heavy metals.	These products are manufactured with nature-derived ingredients such as plants and minerals.	These products are made from natural ingredients
Free from chemicals. However, pesticides are used for the growth of the plant.	Contain toxic levels of metal	Fertilizers are used for growth of the plants	Free from fertilizers, pesticides, and herbicides etc
No global or local standards available to ensure purity	Global and local; standards available in India to ensure purity	Global and local standards available to ensure purity but not everywhere	Many Global and local standards available to ensure purity

**How to Use Herbs in Cosmetics:-<sup>[26]</sup>**

In advance time natural drug or herbs have been used for each medicinal function in addition to for beautification. They were utilized in cleanshape and dried shape. These may be utilized by making a few practices or at once making use of to the frame without or with the use of different ingredients. In truth in advance time those wherein used this manner however now an afternoon their extract decoction, infusion, tinctures, steam distillates and so on are used instead of herbs themselves. Whenever those are organized preservatives need to be brought to them as those are perishable.

- 1. Infusion:** Infusion is essentially sturdy teas and may be organized both in china clay pots or chrome steel vessel. Aluminum vessel need to now no longer be used as those contaminate the infusion.
- 2. Decoctions:** Decoction is ready through boiling the herb with water.
- 3. Extract and Tincture:** Extract is normally organized with hydro-alcoholic solvent and tincture is organized with the solvent having excessive percent of alcoholic.
- 4. Flower Water:** Flower water made within side the identical manner as infusion. The identical training of herbs and water may be used. However the distinction in infusion and plants water is that solvent is permitted to stay in touch with plants in a single day in case of flower water. Flower water also can be organized through the usage of essence (crucial oil) and purified water.
- 5. Oil Soluble Extract:** Oil soluble extract are organized through extracting herbs with petroleum ether. The herb is left in touch with water in a single day. Water combination is located in a vessel containing oil and the vessel is heated until all of the water has been removed. Allow the oil to chill and is then filtered. In this manner oil soluble precept of herb is going into oil.

**TABLE NO.2:- List of Plants with cosmetic application**

Botanical Name/Part Used	Common Name	Form	Cosmetic Use
Acacia concinna pods	Shikakai	Powder	Shampoo's Soaps
Acorus calamus rhizome	Sweet Flag	Powder/Paste	Aromatic, Dusting Powders, Skin Lotions
Allium Sativum bulbs	Garlic	Powder/ Paste	Promotes Skin healing
Aloe Vera Leaf	Aloe	Powder / Paste	Radio-protective Moisturizer, Sun screen
Alpinia galanga rhizome	Galanga	Powder/Paste	Aromatic, In dusting Powders
Avena sativa fruit	Oat	Powder / Paste	Skin tonic / Moisturizer
Azadirachta indica leaves	Neem	Powder / Paste	Tooth Pastes, Soaps, Shampoo's
Balsamodendron myrrha gum	Myrrh	Powder/Paste	Soaps / Shampoo's
Calendula officinalis flowers	Marigold	Paste	Promotes skin care
Cedrus deodara wood	Deodar	Powder/Paste	Shampoo's/Soaps
Centella Asiatica plant	Gotu Kola	Powder/Paste	Wound Healing
Cichorium intybus seed	Chicory	Powder/Paste	Relieves sore eyes/Clears Skin of blemishes
Citrus aurantium peel	Orange	Paste	Skin creams, Soaps, Shampoos
Citrus lemon peel	Lemon	Powder	Heals skin, Prevents Hair Loss
Coriandrum sativum seed	Coriander	Powder	Anti-inflammatory
Crocus sativus stigma	Saffron	Liquid	Post bath massage
Curcuma longa rhizome	Turmeric	Powder/Paste	Skin creams & lotions Antibacterial
Curcuma zedoaria rhizome	Zedoary	Powder/Paste	Antibacterial, Aromatic
Daucus carota seeds	Carrot	Oil	Natural source of Vitamin A
Eclipta alba plant	Bhringraj	Powder/Paste	Shampoo's
Glycyrrhiza glabra root	Liquorice	Powder/Paste	Anti-inflammatory
Hedychium spicatum rhizome	Kapurkachir	Oil	Hair Oils
Hibiscus rosasinensis flowers	China rose	Paste	Shampoo's
Iris florentina root	Orris	Powder	Additive to dusting Powders
Lawsonia alba leaves	Heena	Powder/Paste	In Shampoo's
Matricaria chamomilla flowers	Chamomile	Powder/Paste	Hair Tonic/ Relieves sore Limbs
Moringa oleifera seed	Benjamin	Oil	Hair Oils, Suntan Lotion
Prunus serotina bark	Wild cherry bark	Powder	In shampoo's
Pterocarpus santalinus bark	Red sandal wood	Powder/Paste	In Skin creams



Rubiocordifolia root	Manjistha	Powder/Paste	Wound Healing
Santalum album	Sandal Wood	Powder/Paste	In skin Lotion's
Sapindustrifoliatus fruit cortex	Soap wort	Powder	Natural Detergent
Triticumsativum germ	Wheat germ	Oil	Skin lotions, A natural source of Vit.

## Indian Standard

### HERBAL COSMETICS — GENERAL GUIDELINES

#### a) Selection Of Herbs:-

Selection of Herbal Ingredients Formulators have to cautiously choose herbs/natural substances primarily based totally on their recognized and suggested residences (in literature), residences recognized in cultural historical past or, &conventional use and utilization suggested in conventional books. Formulators shall additionallyobservegood enough care in choosing the bureaucracywherein the herbs might be used as a 'factor' within side the products. Formulators can also additionally use anaturalfactor for more modernmakes use of than recognised in advance provided; good enoughstatistics is to be had on that factor and its more modern use.

#### b) Quantity / Proportions Of Herbs Used:-

Formulators have to have good enoughfacts justifying the (share of the herbs or the natural ingredient(s) for which claims are made, used within side the product. In the absence of clinical facts, availability of the amount of herb in a product to offer the meant beauty benefits, such facts can be primarily based totally at the recognized information, posted literature, and said information in conventional books and/ or scientifically generated facts the usage of suitable in-vitro and/or in-vivo (clinical) methods.

#### c) Herbal Cosmetic Benefit Claims:-

The beautygain claims made for merchandisewill be true, authentic and primarily based totallyat therecords in ownership with the formulators/entrepreneurs. Such records can be primarily based totally at the recognised information, posted literature; information mentioned in conventional books and/or scientifically generated recordsthe usage of suitable in-vitro and/or in-vivo (clinical) methods. No formulators/entrepreneurs shall make any beautydeclare/claims, which are false, exaggerated or misleading. However, in instancesin whichbeautygain claims are relatedparticularly to herbs/natural ingredients, the formulator/marketer shall do so, primarily based totally on good enough and suitablerecords of theirownership justifying that the uniquegaindeclare is genuinelysuppliedwith the aid of using the herb/'natural ingredients. Formulators/entrepreneurs who're incorporating natural ingredient(s) for marinating functions shall make sure any beauty gain declare made will be brought with the aid of using the product as a whole, despite the fact that such advantages aren't resulting from any unique natural ingredient, and such cosmetics will be ruled with the aid of using the modern-day guidelines below D&C Act and Rules as relevant to cosmetics. However, no formulator/entrepreneurs shall make any beautygaindeclare, which isn't alwaysbroughtwith the aid of using the product.

#### d) Quality Assurance:-

It is identified that checking out of naturalsubstances in natural cosmetics isn'tclean and conceivable due the multi-factor nature of naturalsubstances, Formulators the use of herb/naturalsubstances shall undertakeessentialniceguaranteeestrategieven asfinding outto apply an herb/naturalelement. Adequate uncookedclothnicemanagewill befollowedevery timewhile an herb/naturalelement is used. Use of herb/naturalsubstanceswill beachieved through 'Certification via way of means of addition' all throughproduction and such certification documentation will be recorded and maintained within side the relevant 'Master product specification' or 'Bill of materials' or 'Weighment sheet' duly authenticated via way of means of the manufacturing and nice personnel. Written strategiecould be to be had for it and factswill be maintained for having implemented the strategies and their consequences of compliance.

#### e) Shelf-Life Data:-

Formulators might also additionallyundertakeappropriate shelf-lifestyleexamine protocols which make certain product integrity all through the meant shelf-lifestylesdurationthrusuitable data. Visible symptoms and symptoms of decayalong with fermentation, rancidity, alternate in colour, and such different parameters as relevant to the product will be used to showthe stableness of the product. Samples of the goodsuncovered to pre-determinedundertakingsituations of garage shall additionally be examined for confirming the claimed cosmetics benefits. Finger printing method or every otherappropriatetechniquemight be suitableat the same time asproducing shelf-lifestyles data. Stability of natural ingredient(s) confirmed in a cosmetics

system base may be justified and extrapolated to cosmetics with comparable base system with modifications in side regular degrees from confirmed product.

**f) Safety Data:-**

Formulators shall make sure that the completed product is safe (see IS 401 1). <sup>[13]</sup> Results of protection data/such research need to be had with the formulators/entrepreneurs and will be produced, every time required, Formulators/entrepreneurs shall definitely tell the consumer, if there are any precautions to be taken whilst the use of the products, which can be acknowledged to expose protection issues in precise individual/population at the labels of such products. For microbiological evaluation/examination, reference can be made to IS 14648, <sup>[16]</sup> for the reason of hygienic manufacture of cosmetics; reference can be made to IS 11377<sup>[15]</sup> and for sampling details, reference perhaps made to IS 3958. <sup>[12]</sup>

**EVALUATION OF THE FINISHED PRODUCTS OF HERBAL COSMETICS.**

- a) **Physical Evaluation:** Colour, Odour, Form, pH, Net Content.
- b) **Grittiness:** Rub a pinch of product on pores and skin after which take a look at with magnifying glass, if there may be no rash or eruption then it's taken into consideration loose from grittiness.
- c) **Bleeding test:** This take a look at is specially for semisolid preparation. Observe the bleeding of liquid i.e. liquid section omits from preparation. If no bleeding then the product may be known as strong at climatic condition.
- d) **Rheology:** It is used to examine float belongings of liquid or semisolid merchandise unfold cap potential, pour cap potential of product ought to be decide.
- e) **Microbial test:** As natural touchy to microbial growth, microbial must be performed with the aid of using agar properly diffusion approach or turbidometric approach.
- f) **Stability research:** It is performed at increased temperatures (like 45, 90 and 120°C), especially humidity and pH a duration of 6 months and above parameter are evaluated periodically to modifications in product. Infra-red spectroscopy research: The research is beneficial for dedication of excipients compatibility.
- g) **Chromatographic Evaluation:** The contents of beauty product may be decided and showed with the aid of using chromatography like TLC, HPTLC, HPLC, Gas chromatography.
- h) **Sensitivity test:** It is likewise known as patch take a look at. Practice product on 1 cm<sup>2</sup> of animal pores and skin or human epidermis, if there may be no irritation or rashes then it's far loose from sensitivity.
- i) **Irritation test:** Apply the product identical as above and take a look at for erythema and edema at 24 and seventy two hours. Calculate the number one infection index primarily based totally at the sum of the scored response divided with the aid of using 24.
- j) **Toxicity test:** It is performed on animal to calculate LD/50 values and acute, continual toxicity parameter the use of mice preferably.

**CONCLUSION:-**

Nowadays a lot of challenges in the cosmetic industry as face a many problems in the use of the chemical cosmetic redness, itching after the applications. There for the best traditional way of herbal cosmetics use in proper standardization gives very fluent and better appearance. Many people like to use Ayurvedic natural herbal cosmetics it's long duration and easy to use get satisfied results with no any side effects.

Easily available and low cost of herbal cosmetics therefore is preferred than allopathic. In India more than 70% population use natural cosmetics for his or her fitness care. Natural cosmetics have been expanded in private care device and there's an awesome call for the natural cosmetics in everyday life. Healthy teeth, vibrant hair and sparkling pores and skin are essential for the coolest searching of the human body. They additionally comprise substance whose protection is unknown, might be create fitness risk. Beauty arrangements are associated with Critical hazards they does not suggest cosmetics are continuously secure to use. The gift overview specializes in the ability of natural extracts for beauty purposes.

Herbal medicine generally used in strengthen the overall immune system. They stabilized hormones and metabolism. Some specific and less processing get required purity of plant. Traditional remedies are usually safe for all patients unless they are allergic to certain

plant chemicals. Herbal remedies very rarely have side effects as they are completely natural. It's all about healthy living improve your health through the lifestyle choices you make.

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