

Formulation And Evaluation Of Herbal Eye Shadow

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Abstract- The safety and reliability of natural products have triggered the need to produce herbal-based products. The use of herbal cosmetics has become increasingly popular among present-day women. Synthetic coloring agents being used in cosmetics have been found to produce carcinogenic effects. The objective of the present study involved the preparation and evaluation of herbal eye shadow using color matter from natural sources such as beetroot. Prepared herbal eye shadow was evaluated for different evaluation tests such as Color, PH, Flow properties of powder, Bulk density of powder mixture, Compressibility of powder mixture, PH parameter, Water resistance, Transfer resistance, Dispersion of pigment, Color uniformity, Force of application

Keywords- Herbal cosmetics, Eye shadow, Beetroot.

I. INTRODUCTION

In a increasingly advanced era, the needs of each individual in various aspects of life are also growing. Cosmetics itself has become a necessity for various groups. Cosmetics are a mixture of ingredients that are applied to the outer part with the aim of increasing attractiveness and improving a better appearance than before. The main function of using cosmetics is to beautify the user to look more attractive [1]. Cosmetics comes from the Greek word “kosmetikos” which means decorating and arranging things. According to the Regulation of the Head Of the Food and Drug Supervisory Agency of the Republic of Indonesia Number 19 of 2015 concerning Cosmetic Technical Requirements, it is stated that the definition of cosmetics is a material or preparation intended for use on the external parts of the human body (epidermis, hair, nails, lips and external genital organs), or the teeth and mucous membranes of the mouth, especially for cleaning, perfuming, changing appearance, and/or correcting body odor or protecting and maintaining the body in good condition [2].

Anatomy of eye:

The eye is the delicate organ in human body, with a several parts in a near-spherical structure. Each part of the eye is responsible for a certain action. The external structure of eye is given.(3)



Fig. The external structures of eye include

EYE LIDS:

Thin layer of the skin on outer surface to protect surface of eyes from injury. Protect eye from blinking if foreign matters (dust, dirt or debris) come close to eyes and bright light harmful to eyes, helps to moisten the eyes, eye lashes, give additional protection to eyes. Filter foreign particle like dirt, dust, debris or dandruff and prevent them from falling on the eye surface.

EYE MAKEUP:

During all dynasties and periods, the eye makeup remained a daily pre-requisite for women. Eyes are not only the windows to the human soul, but also a powerful tool for communication. A brace of dazzling eyes is a sign of good looks and beauty. Since centuries, eye makeup has played an important role in highlighting the eyes. In historical eras and time periods, different types of colors, styles and trends were used to decorate the eyes. Black pigments/color in the form of kohl was used for centuries to accentuate eye lashes, eyebrows and eyelids.

EYE SHADOW:

Eye shadow are available in the market to add dimension and depth to the eyes, make eyes bigger and attractive there by drawing attention to the eye color or eye appearance. They are designed to apply to eyelids and below eyebrows. Eye shadows are formulated in the form cream/gel, stick and powder either pressed or loose.(4)



Fig. Eye shadow palette

II. HISTORY OF EYE SHADOW

Ancient Origins:

The beginnings of eyeshadow might be traced back to the antique civilizations of Egypt and Mesopotamia. These cultures were pioneers in building cosmetics by mixing commonplace pigments, micronutrients, and oils to adorn their eyes. Individuals have utilized cosmetics for hundreds of years. The earliest guide archeologically proof for eye makeup dates back to predynastic Egypt (c. 5000 – 4000 BCE). Traces of eye paints, most usually malachite, a green mineral, and galena, a black-colored mineral, along with cosmetic palettes, pots and applicators have been found in burials out of that period that period. (5)

Ideal properties of herbal Eye Shadow:

1. It need to be nontoxic and non-irritating.
2. Affordable and seamlessly accessible
3. Eye shadows typically made up of four types of components : bottom fillers, binders, spin, and preservatives .
4. Prolonged examination execute
5. to make eye lingering doubt, there need to be a equilibrium between the fillers and binders .
6. bottom fillers are generally micronutrients as an example mica, talc or kaolin clay, that add bulk and texture to eye
7. lingering doubt (6)

Types of eye shadow:

- Compact/Pressed Powder eyeshadow
- Cream eyeshadow
- Loose glitter eyeshadow
- Liquid eyeshadow(7)

1. Pressed Powder :

Cream eyeshadows are anhydrous mixes made with canvases that have been thickened with either complexion gelatinizing agents or waxes. Anhydrous cream eyeshadow is called as cream- to- greasepaint eyeshadow in light of the fact that it slides onto the eyelids in a cream structure and subsequently change into a delicate Greasepaint. They've advanced thickness and in this manner, the plums and tones are constantly conveyed into the cream base. Its rheological characteristics make them easy to apply. All accoutrements are mixed together and also heated in the medication process for cream- type eyeshadows.

2. Eyeshadow sticks :

Eyeshadow sticks are prepared from canvases, waxes and texturizing agents and colors are dispersed in analogous combine. They've a faint cream- suchlike texture and slide fluently onto the eyelids. The essential excipients are nearly likewise as of powders. But, eyeshadow stick is softer than cream. For expression of eyeshadow stick, 1st homogeneous combination is set exercising painted greasepaint with white or off white rudiments(called as base) like talc mixing and grinding. This step is known as extension. Latterly extension of colors, other white bases are mixed together. Also, spices if exhibition, are included to a homogenous blend. The combine is scattered onto the greasepaint with mixing. Plums are included and mixed in the end. The greasepaint combination is also ready for contraction.

3. Greasepaint eyeshadows :

Greasepaint eye shadow, or weak or pressed write, are the most well- liked types. They're applied onto the upper eyelid by smoothly stroking a beautiful encounter or a sick sponger- sloped applicator, across the skin. Pressed greasepaint eyeshadows illustrate the on- the- go makeup of limp maquillages. Both types of maquillages are nearly look like piecemeal from that passed write contains binder to contain the greasepaint rudiments together. (8)

BEET ROOT:

Red beet is a rich source of beta lacin pigments, which can protect against age related diseases. Beta lacin pigment can be used as a natural additive food, cosmetics and drugs in the form of beet juice as well as beet powder. Beta lacin are water soluble nitrogen containing pigment found in high concentration in red beet which consist of two sub classes: betacyanins (Red violet pigment) and beta xanthone (yellow

orange pigment) they have antimicrobial and antiviral efforts and so can be inhibit the cell proliferation of human tumor cells.

Aim: - Formulation and evaluation of homemade herbal eyeshadow from natural coloring matter (beetroot)

Objective:- The present work formulation and evaluation of herbal Eyeshadow was aimed to formulate a eyeshadow using herbal ingredients with a hope to minimize the side effect as produced by the available synthetic ones.(9)



III. METHODS AND MATERIALS

Ingredients and formulations-

Table-

Sr no.	Ingredient	Quantity	Effect
1	Beetroot powder	3.5gm	Colouring agent
2	Petroleum jelly	2.5gm	Moisturizing agent
3	Starch powder	3gm	Binding agent
4	Glitter	1gm	Shine and bright appearance

EVALUATION OF EYE MAKEUP PRODUCTS:

1.Flow properties of powders

The flow properties of powder type of eye makeup products should be determined especially during filling process of loose powder to the final container or before the compression of pressed cake in case of compressed powders. Control of the powder flow and density of final product is important to achieve high quality of the finished eye makeup

products. Flow properties are measured in terms of angle of repose. Smaller the angle of repose, better will be the flow and vice versa. The angle of repose determined by fixed funnel method.

2.Bulk density and tapped density

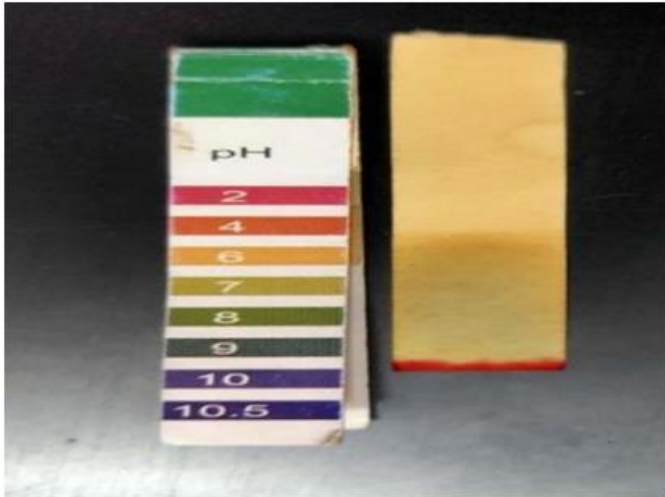
The bulk density (V_b) and tapped density (V_t) are measured for determining the trapped air in the powder and to ensure free followability. The bulk density of a powder is the ratio of Mass of powder sample (untapped) and its total volume including void spaces/volume. It is expressed as grams per millilitre Tapped density is obtained after tapping and is measured as the ratio of the known mass of the powder and its total volume occupied without void volume. Tapping of powder is done in a apparatus that lifts and drops the volumetric cylinder containing powder at a fixed distance. Tapped density is always higher than bulk density. Both the densities provide information about the followability of the powders. The formula for both the densities are given below:

3.Compressibility of powder mixtures

Percent compressibility ($Carr''s$ index) and Hausner's ratio is calculated using bulk and tapped densities. Inter-particle interactions significantly influence the powder flow, which are based on these parameters (formula given below). Lower the values of compressibility index and Hausner's ratio, better will be the flow. These interactions are less significant in free-flowing powder samples, and both the densities will be closer in values. Greater inter-particle interactions are there in poor flowing powder samples, and a more difference will be observed between bulk density is determined by powder pile method. (10)

Skin irritation test



PH Parameter:**Water resistant:****Evaluation test:****Dispersion of colours:**

Opalescent colours are also used at advanced situations in these products, leading to a demand for advanced binder situations. This can lead to reduced inflow characteristics and difficulties when pressing the powders.

Bulk density:

The bulk viscosity of any powder is also important. It can significantly affect the Filler of the final pack or godet and should always be checked once the product has been completed.

Microbiological check:

Before the finished powder can move on to the stuffing or pressing stage, a final microbiological test must always be performed to ensure that no impurities passed during manufacture.(11)

Result:

In last few decades there has been tremendous boost in use of cosmetics by women. However, the hazards cause by these chemicals has come into limelight very recently. The present work formulation and evaluation of herbal Eyeshadow was aimed to formulate a Eyeshadow using herbal ingredients with a hope to minimize the side effect as produced by the available synthetic ones.

Hence, form present investigation it was concluded that this formulated herbal Eyeshadow has better option to women with Eyeshadow has better option to women with minimal side effect through a detailed clinical trials may be done to access the formulation for better efficacy.

IV. CONCLUSION

This review concludes that the operation of commonplace colorings in Eyeshadow expression having no or minimal side execute. Accordingly we might move towards the operation of commonplace colorings to prepare Eyeshadow. This review concludes that the application of commonplace colorants in Eyeshadow formulation having no or minimum side effects.

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