

# FORMULATION OF NATURAL LIP BALM

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## Abstract

*In recent years, the demand for natural products has increased, especially in the cosmetics industry. Lip balm is one of the most popular products that serves the dual purpose of coloring the lips and preventing dryness. While the ingredients in synthetic products have many adverse effects, the word "herbal" is a sign of safety. Popular herbal products include lotions, creams, ointments, shampoos, pills, and lip balms. The main purpose of lip balm is to improve the look and feel of your lips. The non-chemical lip balm hydrates, moisturizes and protects lips from chapped and dry lips. They help maintain the beauty and health of your lips. The lip balm is gender neutral, so both men and women can use it.*

**Keywords:-** Herbal, preparation, Lip balm, Cosmetics, lips, Skin

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## 1. Introduction:-

Nowadays, the demand for cosmetics in the world market is increasing. Global demand for herbal products is increasing. Nowadays, the use of herbs has become more common and people are increasingly looking to use herbs to change their lifestyles and live more. And fairness and use of hair.[1] Recently, the material has increased and the color, texture and bright tone options have changed and expanded. touch This is obvious. Hundreds of colors of lipsticks, lip balms and other products are sold to meet demand. Products; It is evaluated according to quality characteristics such as color, odor, dispersion, pH, melting point, skin irritation and similar properties[2]. The color of the ingredient can also be used to determine its quality and freshness. However, natural shade is less harmful to the environment than natural shade. [3] Lip balm is a product used to prevent dryness on the lips and provide protection from environmental problems. Although the softening point and breaking point are independent of each other, ingredients in formulas such as lip balms can affect them. Dry lips and protect them from bad things. Since lip balm is frequently used by users, the safety of its ingredients is important [5]. Since lips do not contain oil, it is important to provide additional moisture and protection to the entire lips [3].

### 1.1 Lip Balm :-

Lip balm is a cosmetic product that men and women use to keep their lips healthy. It is used to control the shape and size of the lips and to prevent ulcers and cold sores on the affected lips[6]. When creating a lip balm, the concentration of key ingredients such as butter, oil and wax must be balanced[7][8]. Depending on the balance of wax, oil and color, the sample will exhibit various properties [9].

### 1.2 Lip Disorders:-

#### 1. Swelling:-

Allergies can cause lips to swell. Sensitivity to certain foods or beverages, medications, cosmetics, or airborne irritants may be associated with this reaction. [10]

#### 2. Inflammation :-

When inflammation of the lips (cheilitis) occurs, the corners of the mouth will become uncomfortable, itchy, red, cracked and scaly. A diet lacking vitamin B2 can cause cheilitis.

### 3. Sun Damage :-

Lips, especially lips, can become dry and rough from sun exposure. This damage can be minimized by protecting your face from the sun's rays, applying sunscreen to your lips, or wearing a hat in general [11].

#### 1.3 Advantages of Natural Lip Balm:-

- It helps prevent lips from being affected by cold, cracked and dry lips[13].
- Use lip balm to treat the face and tone the skin [14].
- The use of natural lip balm to treat the appearance of The face and condition oskin[14].

#### 1.4 Disadvantages of Natural Lip Balm:-

- Other disadvantages of natural oils are that they are lubricating, comedogenic, and difficult to spread [13].
- Lip balm addiction is another drawback that is typically associated with its use.
- Some lip balms include allergens in them that can result in a rash.
- Other disadvantages of natural oils include being oilier[15-18].

### 2. Materials:-

All the Natural Ingredients were Purchased from trusted Supplier. Which are used in formulation

Table No. 1- Formula for Herbal Lip Balm

Sr. No.	Ingredients	Quantity	Category
1.	Bees Wax	5%	Glossiness
2.	Ghee	2%	Moisturizer
3.	Castor oil	15%	Emulsifier
4.	Honey	5%	Lighten up darker lips
5.	Vanillin	0.08%	Flavouring agent
6.	Vitamin E	5%	Antioxidant, preservative

#### 2.1 Formulation:-

Weigh each and every excipient. In a beaker, combine ghee, beeswax, castor oil, and sunflower oil. Melt the mixture in a water bath at 55 to 60 °C. Vitamin E and honey should be thoroughly mixed in the beaker to prevent honey from clumping. VANILLIN FLAVOR is added. Fill the lipstick moulds with the mixture. Before putting the mixture into the lipstick moulds, use a cotton swab to add glycerin to the mould. Placing the filled Forms in an ice bath for ten minutes.

#### 2.2. Evaluation Parameters of lip balm :-

The performance of lip products can be used to determine their quality. Ratings are important for any product for many reasons. It helps maintain stability as well as consistency and purity of the product. This section explains important measurements for lip

products. From the user's perspective, the beauty of cosmetics is very important. This includes the color, taste and texture of the product [15]

- **Spreadability Test :-**

Transmission capacity was examined by applying a lip to the slide and any deformation and cracking was evaluated as described by Fernandes et al [19]. 's explanation. The analyst defined the following standards for this test:

**G** – Good: consistent, doesn't leave pieces, flawless application, doesn't cause the lip balm to deform;

**I** – Intermediate: consistent, few fragments are left behind, proper application, and minimal lip balm deformation;

**B** – Bad: Lip balm is severely deformed; application is difficult or improper; and there are numerous fragments left behind.[21]

- **Hardness Analysis :-**

For this investigation, the AMETEK Brookfield CT3 Texture Analyzer was used to analyse hardness. This test was run to evaluate the lip balm's hardness. Because Probe TA 39 is the most appropriate Probe to Measure Lip Balm's Hardness [22], it was used.

- **Skin Irritation Test :-**

It is carried out by applying lip balm on the skin for 10 minutes[23]

- **PH parameter :-**

Measurement: To determine the pH, 1 g of sample was dissolved in 100 ml of water. A pH metre was used to measure pH[24].

- **Organoleptic properties :-**

Organoleptic characteristics of the lip balm, such as colour, odour, taste, and appearance, were examined[25].

- **Melting point :-**

The substance was made molten to fill capillaries in order to ascertain the melting point (duplicate). The capillaries were connected to a thermometer-equipped device and submerged in a vial of water that was kept at a set temperature. The melting point of a lip balm sample was defined as the temperature at which melting occurred [7].

- **Perfume stability :-**

After 30 days, the herbal lips balm underwent testing to record its fragrance[26–27].

- **Surface anomalies :-**

This was investigated for any surface flaws, such as the absence of formation crystals on the surfaces or any microbial or mould contamination[27].

- **Breaking point :-**

The strength of Lipbalm was assessed using the breaking point method. The lip balm was positioned inch from the edge of the support and held horizontally in a socket. The weight was increased progressively by a predetermined amount (10 gm) at predetermined intervals of 30 seconds, and the weight at which it broke was regarded as the breaking point.

### 3. Results :-

Table No.2 Evaluation Parameters And Results

Sr. No.	Evaluation parameter	Observed value
1.	Melting Point	63°C – 65°C
2.	Organoleptic properties	-
2.1	Colour	Baby Pink
2.2	Odour	Pleasant
2.3	Appearance	Smooth
3	Test of spread ability	-
4	pH measurement	6.0
5	Skin irritation	No
6	Breaking point	29 gm[29]

### 4. Conclusion :-

The cosmetics industry is growing rapidly due to the huge demand for beauty products. This research examines the current status of natural bottom balm products. This study provides recommendations for using herbs to create lipsticks, which have several drawbacks. The formulation is equally stable in refrigerated and room temperature storage. When tested for stability, samples stored at room temperature and refrigerated perform the same. The physicochemical properties of each lip were analyzed. It has been determined that lip balms made from natural ingredients are safe to use and this particular combination gives the best results in lip production. According to the latest research, the trend will remain stable.

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