



Lipstick Cosmetic Product: A Review

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Abstract Lipstick is a cosmetic product containing natural ingredients such as pigments, waxes, oils and emollients were used to formulate lipstick. Both organic and Inorganic pigments are employed. Lipsticks are one of the key cosmetics to be used by the women. Lipstick is commonly regarded, for good or ill, as the typical, perhaps even the proto-typical decorative Cosmetic. Since the days of Nefertiti, modification or accentuation of lip colour has been known to play a Prominent part in the achievement of cosmetic effect. Enabling the user to adjust lip outline and modify External perception and visual impact of mouth form and texture, lipstick has become an almost universal Constituent of ladies' handbags. Moist lips, dry lips, shiny lips, smooth lips, all are simple matters of cosmetic Application. Put on skillfully, lipstick can substantially alter the apparent facial characteristics of the user.

Keywords: Manufacturing of lipstick, Formulation, Composition, Evaluation

Introduction

Lipstick is a cosmetic product that is widely used by women all over the world. It is a beauty essential that adds color and enhances the appearance of the lips.

In the 16th century, lipstick became more widely used and was made from ingredients like beeswax and red pigment from insects. Over time, the formulation of lipstick has evolved, and today it is made from a combination of natural and synthetic ingredients.

Lipstick is also available in different finishes, such as metallic, shimmer, and glitter. Metallic finishes have a reflective shine, while shimmer finishes provide a subtle glitter effect. Glitter finishes provide a more dramatic and sparkly look.

Lipsticks can be defined as a dispersion of the colouring matter in which a base consisting of a suitable blend of oils, fats and waxes with suitable perfumes and flavours moulded in the form of sticks to impart attractive gloss and colour when applied on lips. Lipsticks impart a moist appearance to the lips by disguising their defects.



Figure 1: Lipstick



History of Lipstick

The use of lipstick dates back to ancient times, where it was used by the Egyptians, Greeks, and Romans. The Egyptians used a mixture of crushed beetles and ants to create a deep red color, while the Greeks and Romans used a mixture of red ochre and animal fat. In the 16th century, the use of lipstick became popular among European women, who used a mixture of beeswax and red stains from plants to create their lipstick.

Ideal Properties

- It should be stable both physically and chemically.
- It should not dry on storage.
- It should be nontoxic & nonirritant to the lips
- It should impart uniform color to the area of application.
- It should make lips soft.
- It should have stability towards environmental conditions.
- It should be completely free from grittiness.
- The container should operate easily.

Uses of Lipstick

- Adding color to the lips
- Moisturizing the lips
- Protecting the lips
- Defining the shape of lips
- Boosting confidence
- It makes you more attractive

Composition

- Wax mixture,
- Oil mixture,
- Bromo mixture,
- Colours,
- Preservatives
- Fragrance • Antioxidants,
- Surfactants and other additives

Different Types of Lipstick

- Moisturizing lipsticks
- Satin and sheer lipstick
- Matte and lipsticks
- Cream lipsticks
- Pear and frosted lipsticks
- Long wearing and transfer resistant lipsticks





Figure 2: Lipstick

Aim and Objectives

The aim of this review article is to provide an in-depth analysis of lipstick, including its history, formulation, and safety concerns.

The objectives are to

- Understand the history of lipstick and its evolution over time.
- Discuss the formulation of lipstick, including the ingredients used and their functions.
- Explore the safety concerns associated with the use of lipstick, including the potential health risks.

Manufacturing of Lipstick

• Steps involved is:

Melting
|
Mixing
|
Moulding
|
Labelling
|
Packing

Advantages

- It makes you more attractive
- Lipstick protect and moisture your lips
- Lipstick makes your face look slimmer
- Lipstick make you look healthy and well
- Lipstick provide beauty to face



Disadvantages:

Heavy Metals

- Studies have shown that lipsticks have concerning levels of chromium, cadmium and magnesium

Lead

- It has been revealed that most of the lipsticks have a dangerously high amount of lead. Lead is a neurotoxin and can affect the nervous system. It can Also cause brain damage.

Formaldehyde and Mineral Oil

- Formaldehyde is a preservative, which is also known as human carcinogen. Wheezing, coughing, irritation of the eyes and skin are other effects of Formaldehyde.

Parabens and Bismuth oxy chloride

These are two other ingredients that are used in the making of lipsticks. The harmful effect of lipsticks is due to the carcinogenic property of these two Ingredients. The parabens act as preservatives just like the formaldehyde. Though this is used in preserving the lipstick, it is very harmful for the Body.

Formulation of Lipstick:

- **Pigment premilling:** The first step involved in the formulation of herbal lipstick is pigment premilling where the agglomerates in the powder are broken down to give the lipstick a homogeneous smoothness and even colour.
- **Melting and mixing:** The next step involved is the melting and mixing stage, since waxes are solid at room temperature and can not be combined with other ingredients to make the waxes melted simple to make this process. Typically, it can be combined with oil, and the pigment and other additives are added and blended to form a homogeneous substance to the melted foundation.
- **Molding Molding:** is the actual phase in which the molten lipstick is poured into metal or plastic mold, the mixture is poured when it is hot so it is helpful to harden and then removed with a slight pressure from the mole.
- **Flaming:** Flaming is the last stage in which the lipstick passes through the flame, is usually held and twisted in the flame for up to a second and then removed to prevent melting and losing shape to achieve a shiny finish and then put in the bottle. Different formulations are made from Test 1 to Test 5 to find the superior lipstick with colorant and oil as variable parameter.

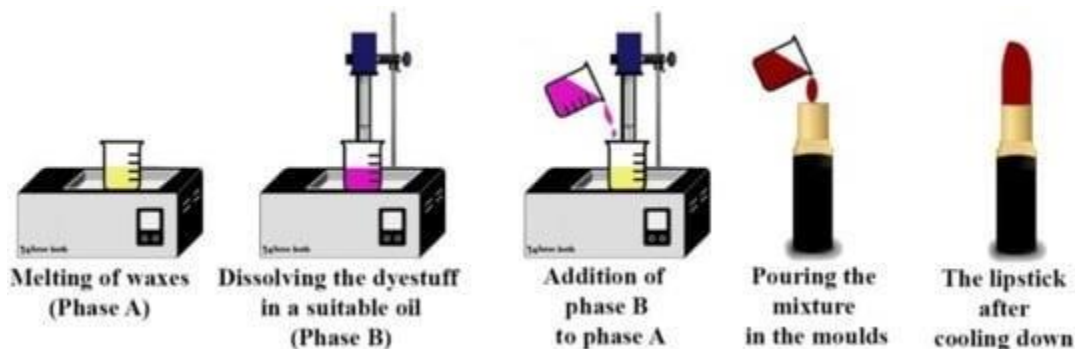


Figure 3: The general method of preparation for lipsticks

Evaluation of Lipstick

It is very essential to maintain uniform standard for lipstick, keeping this view in mind the lipstick was evaluated on the parameter such as melting point, breaking point force of application surface anatomy etc.



Melting Point

Determination of melting point is important as it is indication of the limit of safe storage. The melting point formulated lipstick was determined by capillary tube method, the capillary was filled and kept in the capillary apparatus and firstly observed the product was slowly melted. After some time observed product was completely melted. The above procedure was done in 3 times and melting point ratio was observed in all formulation

Breaking Point

Breaking point was done to determine the strength of lipstick. The lipstick was held horizontally in a socket inch away from the edge of support. The weight was gradually increased by a specific value (10 gm) at specific interval of 30 second and weight at which breaks was considered as the breaking point.

Solubility Test

The formulation herbal lipstick was dissolved in various solvents to observe the solubility. pH parameter The pH of formulated herbal lipstick was determined using pH meter. Skin irritation test It is carried out by applying product on the skin for 10 min.

Microbial Testing

Contamination from raw materials, moulds, storage kettles or lipstick container can lead to microbial growth. The test consists of plating a known mass of the sample on two selected culture media specifically suitable for the growth of bacteria fungi incubating them for a specified period to permit the development of visual colonies for counting. The limit is, not more than 100 µo/gm

Rancidity

Rancidification is the decomposition of fats, oils and other lipids by hydrolysis or Oxidation. It leads to obnoxious odour, bad taste & sticky product & sometimes change of Colour of the product. Testing of rancidity can be done by determining its peroxide Number.

Breaking Load Test

The test is to find out the value of maximum load that a Lipstick can withstand before it breaks. The protruded lipstick salve is subjected to a number of weights hanging from it. The weight at which the lipstick breaks is its Breaking Load.

Safety Concerns

There are several safety concerns associated with the use of lipstick. One of the main concerns is the presence of heavy metals in some lipstick formulations. Heavy metals such as lead, cadmium, and chromium have been found in some lipstick products, and they can pose a health risk if ingested or absorbed through the skin. Exposure to these metals can cause a range of health problems, including developmental delays, reproductive issues, and cancer.

Another safety concern associated with the use of lipstick is the presence of harmful chemicals. Some of the chemicals that have been found in lipstick products include phthalates, parabens, and formaldehyde. These chemicals can cause a range of health problems, including hormonal disruptions, allergies, and cancer.

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