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**<u>Review Article</u>** 

# **A REVIEW ON LIPSTICK**

Geeta Khonde<sup>\*1</sup>, Vishal Kanoji<sup>2</sup>, Dr. Vivek M. Satpute<sup>3</sup>, Santosh A. Waghmare<sup>4</sup> and Dr. Hemant V. Kamble<sup>5</sup>

<sup>\*1,2</sup>Student, Department of Pharmaceutics, Loknete Shri Dadapatil Pharate College of Pharmacy, Mandavgan Pharata, Shirur, Pune, Maharashtra, India.

\*<sup>3,4</sup>Professor, Department of Pharmacy, Loknete Shri Dadapatil Pharate College of Pharmacy, Mandavgan Pharata, Shirur, Pune, Maharashtra, India.

<sup>\*5</sup>Principle, Department of Pharmacy, Loknete Shri Dadapatil Pharate College of Pharmacy,

Mandavgan Pharata, Shirur, Pune, Maharashtra, India.

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# \*Corresponding Author Geeta Khonde

Student, Department of Pharmaceutics, Loknete Shri Dadapatil Pharate College of Pharmacy, Mandavgan Pharata, Shirur, Pune, Maharashtra, India.

# ABSTRACT

Cosmetics have been in high demand since prehistoric times. Formulations for lipstick are used to enhance the appearance of lips. Lipstick is a cosmetic item that gives the lips colour, texture, and protection. It also contains pigments, oils, waxes, and emollients. There are several different types of lipstick that are only worn by women. The natural and safe component is found in organic lipstick. Additionally, they contain natural nutrients that support healthy lips. The prolonged use of synthetic lipstick colours can have major negative effects on the skin, including cancer and skin rashes. Using natural colour extracts from various natural sources might lessen the negative effect. This review mainly focuses on lipstick formulation, natural colourant extraction, and evaluation.

**KEYWORDS:** Herbal lipstick, Natural colourants, Bixa Orenella, Beta Vulgaris, Daucus Car-rota, Hylocereus Polirhizus.

# I. INTRODUCTION

A cosmetic is any product that is intended to be applied to human skin by rubbing, sprinkling, spraying, pouring, or any other method for the purposes of beautifying, enhancing, or otherwise altering appearance, as defined by the Drugs and Cosmetic Act, 1940 and 1945 regulations. The pigments and dyes from the lake are dispersed to give the lipstick its colours. Lipstick's earliest known use dates to the Demesne Sumerian of UR in the year 5000 BC.

Different cultures have adopted and rejected lipstick over the years, with varying degrees of support for and opposition to the introduction of new cosmetics.<sup>[1]</sup>

Lipstick is a cosmetic item used to make ladies look more beautiful. Herbal lipstick is a cosmetic item that includes colour, texture, oil, scent, preservatives, and protection for the lips. The formulation of the lipstick is used to enhance the appearance of lips. Because natural cosmetics are secure, herbal lipstick is becoming more and more popular. Women can use and handle it easily. This product's size has grown, along with the variety of colour shades, textures, and glosses. The adverse effects of herbal lipsticks are minimal. Natural nutrients or ingredients in herbal lipstick make it safe to use and promote healthy lips. Herbal lipsticks are used to provide lips with a beautiful colour, a smooth texture, and protection.<sup>[2]</sup>

Colorant or pigment is a key ingredient in the composition of lipstick since it affects the product's aesthetic appeal. Both artificial and natural sources can produce colourants. Chemical processes are used to create synthetic colours. The artificial colours that give lipstick its colour are harmful to humans when consumed and can have negative effects like allergies, dermatitis, skin discolouration, dryness of the lips, etc. They may occasionally cause cancer and even be fatal. This restriction stimulates the use of natural colourants in lipstick manufacturing. Natural sources like plants, insects, and algae are used to extract natural colours.<sup>[3]</sup>

#### **Ideal Characteristics of Good Lipstick**

- ➤ It shouldn't irritate.
- Plasticity ought to have been necessary.
- It needs to be non-toxic.
- ➤ It ought to be chemically and physically stable.
- It shouldn't dry out while being stored.
- It needs to be devoid of large particles.
- > It should keep the colour of your lips after application for a longer period of time.
- > It should have a bright, dry appearance without any perspiration.
- ➢ It should have a pleasing flavour, aroma, and taste.
- There shouldn't be any melting or hardening within a tolerable range of climatic temperatures.<sup>[4]</sup>

### **ANATOMY OF LIPS**

Humans have soft, flexible lips in their mouths, which aid in communication and food intake. The upper and lower lips are referred to as "Labium superius ores" and "Labium inferiors ores," respectively. The vermilion zone is the reddish area inside the vermilion border, which is the point where the lips meet the surrounding smooth skin. The top lip's vermilion border is known as the Cupid's bow. A tubercle is a fleshy protrusion in the middle of the top lip.<sup>[5]</sup>



Fig No:1.

## **BETA VULGARIS**

The family of Chenopodiaceae includes beets. It is a vivid shade of crimson. Common names for beetroot include beet, chard, spinach beet, sea beet, garden beet, and white beet chukandar. It contains strong therapeutic qualities that positively impact the human body. The beetroot has various therapeutic benefits and can help prevent heart disease and a few types of cancer. As an antioxidant, depressive, antibacterial, antifungal, and diuretic, various plant parts are employed. Beet is raised for use in food (salad, juice). Beets are helpful in preventing cancer. Beetroots are rich in other useful components such as glycine, betaine, saponin, betacyanin, folate, betanins, and flavonoids. Red beetroot is a rich source of minerals (manganese, magnesium, sodium, potassium, iron). The antibacterial and antiviral properties of beetroot are also well documented. Due to their high nitrate and sugar content, beets are one of the natural foods that enhance energy. In addition to being rich in minerals, vitamins, and nutrients, beets also contain special phytochemical compounds (carotenoids, phenolic acid) that have medical applications. This makes them great dietary supplements. A good health tonic is a beetroot.

Many food items employ beet powder as a colouring additive. Harvesting of beetroot for the fresh market and processing takes place primarily in September and October.<sup>[6]</sup>

#### **Method of Preparation**

The type of chemical used has a relatively small impact on lipstick creation. It can be suggested to use the moulding process as the standard method for creating lipstick.

Plant-based lipstick has been created using the standard lipstick formulation process. In a nutshell, all the hard, mild waxes were melted over a double boiler or a heating coat in decreasing order of melting point using a Chinese box. Castor oil was added to the thick mixture of pigment and colouring agent, which was then heated until the two phases had reached a specific temperature. The surplus was put into the lipstick moulds, which were kept in an ice bath. At 4000 C, vanilla essence, lemon juice, and powder were added. After removing some of the surplus solidifications with the blade, the lipstick was removed from the mould and agitated. Installed in a lip container, the prepared lipstick was utilised for a more thorough analysis.<sup>[7, 8]</sup>



Fig No: 2 Standard method for preparation of lipstick.

#### Herbal lipstick formulation

Herbal lipstick is a type of lipstick that uses natural materials instead of synthetic ones, such as herbs and plants. Herbal lipsticks typically contain plant-based, chemical-free components. Herbal lipsticks frequently contain a variety of herbs, for instance.

Aloe vera: Aloe vera is a common ingredient in herbal lipsticks because of its well-known hydrating and calming effects.

- Chamomile: Chamomile is a popular ingredient for calming irritated or dry lips because of its anti-inflammatory and calming qualities.
- Calendula: Calendula is a popular component in lipsticks used to cure chapped or injured lips because of its healing capabilities.
- Beetroot: Beetroot is an excellent ingredient for herbal lipsticks because it naturally contains pigment.
- Rose petals: Rose petals are a wonderful component for calming irritated or dry lips because of their hydrating and calming qualities.

Since herbal lipsticks sometimes lack synthetic dyes and scents, they're a great alternative for those with sensitive skin. Given that they frequently lack artificial colouring and smells, herbal lipsticks are a fantastic choice for those with sensitive skin. Additionally, they are cruelty-free and eco-friendly.<sup>[9]</sup>

 Table No: 1 Standard ingredient quantities and relevance for formulation of herbal lipstick.

Ingredients	Importance	Quantity				
		<b>S1</b>	S2	<b>S3</b>	<b>S4</b>	<b>S5</b>
Palash Flower	Colouring agent	4g	5g	4.6g	5.3g	5.2g
Turmeric Powder	Anti-bacterial	6g	5g	5.6g	5.3g	5.2g
Strawberry Essence	Flavouring agent	2ml	1.8ml	1.5ml	2ml	1.9ml
Lemon Juice	Anti-oxidant	2ml	1.9ml	1.8ml	2.1ml	2.2ml
Mustard Oil	Blending properties	50ml	55ml	53ml	57ml	54ml
Gum Acacia	Glossy & hardness	16g	16.9g	16.5g	16.9g	15g
Bees Wax	Glossy & hardness	16g	16.9g	16.5g	16.9g	15g
Ripe fruit of Shitake	Surfactant	6g	6.5g	6g	7g	8g
Vanilla Essence	Preservative	q. s	q. s	q. s	<b>q</b> . s	q. s

## **Evaluation parameters of lipstick**

Maintaining a uniform standard for herbal lipstick is crucial, so the lipstick formulation was assessed based on factors including melting point, breaking point, the force of application, surface irregularities, etc.

## Melting Point

The melting point indicates the limit of safe storage, which must be determined. By using the capillary tube method, it was possible to determine the melting point of lipstick formulations. The capillary was filled, kept in the capillary apparatus, and the substance was first seen slowly melting.<sup>[10]</sup> After occasionally seeing goods were fully melted. The aforementioned

technique was carried out three times, and the melting point ratio was noted in each formulation.<sup>[11]</sup>

## Breaking Point

Weight at which breaks and value (10gm) at a certain interval of 30 seconds The breaking point test is used to gauge a lipstick's tensile strength. Put lipstick in a socket inch from the support's edge, horizontally. The breaking point is thought to occur when the weight is increased by a certain amount.<sup>[12]</sup>

## ➢ Force of application:

It is a test for measuring the force that will be applied in comparison. Lipstick was applied at a 45-degree angle to cover a 1-inch square area on a piece of coarse brown paper that was kept on a shadowgraph balance until it was completely covered. The pressure reading serves as a gauge for application force.<sup>[11]</sup>

## Surface Anomalies

This was examined for surface flaws such as the absence of crystallisation on surfaces and contamination by moulds and fungi, among other things.<sup>[13]</sup>

## Aging Stability

Keep the product at 40°C for an hour while monitoring different factors such as how the product applies, how wax crystallises on the surface, and how much oil bleeds.<sup>[14]</sup>

pH Parameter
 Using a pH metre, ascertain the lipstick's pH.<sup>[15]</sup>

#### Skin Irritation test

It involves putting a substance on the skin for 10 minutes.<sup>[16]</sup>

#### Perfume Stability

The stability of perfume can also be evaluated by periodically comparing it to brand-new lipstick while keeping lipsticks in an oven set at 40 degrees Celsius.<sup>[17]</sup>

#### **II. CONCLUSION**

The review reviewed the formulation of conventional lipsticks and emphasised the advantages of herbal ingredients. This review contributes to the development of quality

standards for lipstick production in the present. In conclusion, herbal lipsticks are a fantastic substitute for conventional, synthetic-ingredient-based lipsticks. They are made with all-natural substances, including plants and herbs, which provide a variety of advantages for the health of the skin and lips. Herbal lipsticks are a fantastic choice for persons with sensitive skin because they are free of damaging chemicals, synthetic colours, and scents. Additionally, they are cruelty-free and eco-friendly. Additionally, a lot of herbal lipsticks have components that have hydrating, calming, and healing characteristics, making them a fantastic choice for those who have dry or injured lips. In conclusion, herbal lipsticks are a healthy, secure, and efficient choice for anyone looking for a premium lip colour product.

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