ISSN No:-2456-2165

Formulation and Evaluation of After Shaving Gel by Using Eucalyptus and Peppermint

A Project Report (BP813PW) SubmittedTo
Dr. Babasaheb Ambedkar Technological University, Lonere

For Partial Fulfilment of Semester VIII CreditsOf
"BACHELOR OF PHARMACY"
Under the Faculty of
"PHARMACY"

Mr. Kanawade Somnath ShriramPRN: 1969081823058
Final Year B. Pharm. (Sem-VIII)

Under the Guidance of

Miss.Patil .S.S. Assistant Professor
M. Pharm. (Quality Assurance)

***Ashokrao Mane Institute of Pharmaceutical Sciences &Research, Save* 2021-22**

ISSN No:-2456-2165

This is to certify that the project report entitled **"Formulation And EvaluationOf After Shaving Gel By Using Eucalyptus And Peppermint"** is carried out by **Mr.Kanawade Somnath Shriram** under the guidance of **Miss.Patil .S.S.** for the partial fulfillment of the requirement of **Semester VIII** credits of the degree of **Bachelor of Pharmacy** under faculty **Pharmacy** of **Dr. Babasaheb Ambedkar Technological University, Lonere.**

CERTIFICATE

Place: Save **Principal**
Date:

ISSN No:-2456-2165

This is to certify that the project report entitled **"Formulation and Evaluation of after Shaving Gel by Using Eucalyptus and Peppermint"** is carried out by **Mr. Kanawade Somnath Shriram** under my supervision and guidance for the partial fulfillment of the requirement of **Semester VIII** credits of the degree of **Bachelor of Pharmacy** under faculty **Pharmacy** of **Dr. Babasaheb Ambedkar Technological University, Lonere.**

CERTIFICATE

Place: Save **Signature of Guide**
Date:

ISSN No:-2456-2165

DECLARATION

I, hereby, declared that the project report (BP813PW) entitle **"Formulation and Evaluation of after Shaving Gel by Using Eucalyptus and Peppermint"** iscompleted and submitted by me.

Place: Save
Date: **Signature of the Student**

ISSN No:-2456-2165

CONTENTS

ISSN No:-2456-2165

Abbreviations	**Full Form**
Fig.	Figure
No.	Number
pH	Hydrogen ion concentration
et al	Et alai
g	Gram
v/v	Volume by volume
mg	Milligram
ml	Milliliter

List of Tables

List of figures

ISSN No:-2456-2165

ABSTRACT

An after-shave is a moisturizing solution that can help prevent and correct skin shaving. This product helps to moisturize and protect the skin from irritation. The cool effects of the product can make your skin feel cool and fresh after shaving. Shaving can have many side effects, such as cuts, bruises, irritation, or sores, Burning. Contrary to popular belief, hair does not grow thicker after shaving. These different questions have created products called "after shaving". What appeared to be the fastest were the hemostatic control products or even to stop the bleeding as soon as the contraction occurred. They are introduced for a long time in the form of sticks, and then finished with the product in the form of a lotion. The most popular will be the lotion after shaving. There are many types of shaving with or without fat. These products are gradually being supplemented with highly confidential products. Herbal medicine is still a pillar for almost 75-80% of the world's population, especially in developing countries, in primary health care due to better cultural acceptance, better adherence to the human body and less side effects. Herbal medicines contain a plant or part of it to treat injuries, diseases or ailments and are used to prevent and treat diseases and ailments or to promote health and healing. It is a drug or modification made from a plant or plants and used for any such purpose.

ISSN No:-2456-2165

CHEPTER OINE
INTRODUCTION

After shaving the gel began popular as a means prevent infection. Ancient razors were not as sharp as they are today. So shaving was a difficult and difficult task. A lot of cuts and nicks were expected, when you will shave.

Shaving can have many side effects, such as cuts, bruises, irritation, or sores; Burning contrary to popular belief, hair does not grow thicker after shaving. These different questions have created products called "after shaving". What appeared to be the fastest were the hemostatic control products or even to stop the bleeding as soon as the contraction occurred. They are introduced for a long time in the form of sticks, and then finished with the product in the form of a lotion. The most popular will be the lotion after shaving. There are many types of shaving with or without fat. These products are gradually being supplemented with highly confidential products [1].

Aftershave is used for that and the word it means - to treat your skin after shaving Aftershave is an oil, ointment, bath or ointment applied to the skin after shaving, as noted in the book The Art of Shaving. Often advertised in men, post-shave products reduce the number of skin care measures. Although some aftershave are nonsense; their only goal is to alleviate the irritation caused by shaving; Many commercially available aftershave works as moisturizers, toners and cologne. Aftershave contains any type of liquid, oil, gel, or other substance that should be applied to your body after shaving. Using aftershave is a common practice. For the most part, there is no harm in applying aftershave to remove germs or soothe your skin. But some aftershave can be harmful to your skin, or even toxic. Here's what you need to know about what aftershave is used for, what ingredients it should have (and what you should avoid), and whether it is suitable for anything but shaving. The benefits of aftershave depend directly on what it is. But an astringent-based astringent after shaving acts as a facial sanitizer after shaving facial hair. When you shave, you often leave behind many thin strands and exposed patches of epidermis (skin) and pores that may contain germs or other substances inside. Typical shaving contains ingredients known as isopropyl alcohol (isopropanol) or ethyl alcohol similar to those used in hand sanitizer or household cleaners, such as rubbing alcohol. These ingredients kill germs or toxins on your face after shaving.

That's why alcohol-based aftershave stinks when you put it on your face, it isantibacterial and antiseptic. Although antiseptic properties can be very beneficial, alcohol will naturally dry your skin. If you have naturally dry or sensitive skin, be careful when using lotions or lotions. Alcohol can make your dry skin worse or irritate sensitive skin. Fortunately, post-shaving formulas have changed and improved over the past few years. Now you can find post-shave creams that are designed to work best for those with sensitive skin. If you like a moisturizing formula but have dry skin, there are even non-alcoholic cosmetics now available. Look for a foundation that includes aloe Vera or other natural ingredients that will help replenish your skin with water. You will be able to feel the benefits of clean skin and firm pores, with a moisturizing and gentle formula. If you still prefer to use an alcohol-based ointment, apply a moisturizer to help soften your skin and relieve dryness

A. Gel

Gels for homogeneous medicines, Semisolid preparations usually consist of solutions or dispersing ofone or more drugs into appropriate hydrophobic and hydrophilic bases. Qualified agents are used for gel preparation. Antioxidants, Preservatives, and stabilizers may be added to the gels. The gels cover large open wounds, and the most damaged skin will become infertile [4].

“The solids are usually plain semisolids that contain soluble active substances. ”

The word “gel” is derived from “gelatine”, and both “gel” and “jelly” can be translated after the Latin gelu for “frost” and the gel are ,meaning “freeze” or “congeal” .The use of the word “gel” as aclass began in the late 1800s as chemists tried to classify semisolid substances according to their phenomenological properties instead of their molecular naming. The gels are generally consideredto be more durable than the gels because the gels contain strong crosslinks, high density of physical bonds, or just a small amount of fluid. Gel-forming polymers produce a variety of solvents, starting with sol and growing into mucilage, jelly, gel, and hydrogel [5].

"The gel is a solid or solid system of at least two parts, consisting of a closed mass and penetrating fluid" [6]

B. Gel separation

- Controlled release gels
- Orgonogeles
- Expand the release jars
- Amphiphilic gels
- Hydrophilic gels
- Waterless gels
- Controlled release gels

Delivery of drugs to the nasal or ocular membranes of a local or systemic action encounters many obstacles. The gel formulation with appropriate rheological and mucoadhesive properties increases the contact time in the absorption zone. However, drug withdrawal of the gel should continue if the benefits are to be derived from a long-term contact.

ISSN No:-2456-2165

These gels are made up of a synthetic fluid modeled on a polymer concentration of less than 0.1%, and it was shown that sodium was the most important ion-promoting gel in vivo. Rheology, though it may be a questionable process to test the mucoadhesive properties of polymers, it has been shown that the interaction between mucin and polymers is more likely to be characterized by weakened gel.

- Orgonogeles

Sorbitan monostearate, a hydrophobic non-ionic surfactant, as well as a number of organic solvents such as hexadecane, isopropyl myristate, and a range of vegetable oils available. Gelation is achieved by dissolving / dispersing an organogelator in a hot solvent to produce an organic solution / dispersion, which, in cooling, puts into a gel form. Such Orgonogeles are influenced by the presence of additives such as hydrophilic surfactant, polysorbate 20, which improve the stability of the gel and convert the microstructure of the gel from individual tube networks to star-shaped "clusters" in the progressive fluid phase. Another solid monoester in the Sorbitan ester family, Sorbitan monopalmitate, also gel-soluble gels to give opaque, semisolids back to thermo. Like the Sorbitan monostearate cells, the microstructure of the palmitate cells consists of a connected rod- like network of tubes.

- Extended release gels

Controlled discharge technology consists of an agglomerated, hydrophilic complex which, when pressed, forms a matrix of controlled emissions. It contains xanthan and a locust bean gum (two polysaccharides) mixed with dextrose around the substance of the drug. In the presence of water, the interaction between the parts of the matrix makes the gel firm while the inner lining remains hydrated. it begins to erode. This erosion allows the drug to "disperse back" out of the gel-matrix ata controlled rate until the matrix is eroded and most of the drug is removed. An important part of regulating the release rate lies in the structures of the gel matrix.

- Amphiphilic Gels

Amphiphilic gels can be prepared by mixing a solid gel such as Sorbitan monostearate or Sorbitan monopalmitate with a liquid phase such as liquid Sorbitan esters or polysorbate and heated to 60 ° Cto form clarity.

Isotropic sol phase, as well as cooling sol phase to form an opaque semisolid at room temperature. The Amphiphilic gel microstructures consist mainly of clusters of gelator molecules assembled into sol phase cooling, forming a 3D network throughout the continuous phase. The gels showed thermo modification. Gelation temperature and viscosity increased with increasing gel concentration, indicating a very strong gel network. At temperatures close to skin temperature, the gels are very soft, this will allow for topical use.

- Hydrophilic Gels

Hydrophilic gels are made up of an inner layer made of polymer that produces a flexible three- dimensional structure similar to a net, which fixes the liquid car as an outer layer. Intermolecular forces bind to the solvent molecules of a polymeric net, thereby reducing the movement of these molecules and producing a structured system with increased viscosity.

- Waterless gels

Ethyl cellulose has been successfully developed as a non-nonaqueous gel containing propylene glycol dicaprylate / disparate. Invisible novel gel showed rheological profiles associated with a three-dimensional body-linked gel network, with the appropriate mechanical features to be used as adrug delivery vehicle. Molecular conformation of solvent has been found to influence cellular interactions associated with the formation of ethyl cellulose gel networks. Jelly matrices showed outstanding viscoelastic behavior, stress yield and thixotropy. Rheological and mechanical properties have shown a significant tendency to increase the length of the polymeric chain and the concentration of the polymer. Good line communication was found between rheological structures and equipment. Solvent molecular conformation was found to play a role in influencing the formation of gel networks by intermolecular hydrogen bonding between chains of ethyl cellulose polymer.

C. Advantages of shaving After gel

- Reducing itching and inflammation in skin and hair follicles
- Closing pores to prevent germs, contaminants, or chemicals from entering, (they can reduce breakouts,burns, or bumps).
- Helping the cut on the shave cools down quickly

D. Disadvantages of shaving After Gel

- It does not work on sensitive skin.
- Men with skin conditions such as dermatitis, psoriasis cannot use it.

E. Drug Profile

- Eucalyptus

Eucalyptus is a fast-growing evergreen tree native to Australia. As an ingredient in many products, it is used to reduce symptoms of cough, flu, and congestion. It is also found in creams, gels and ointments aimed at relieving muscle and joint pain. [7] There are more than 400 different species of eucalyptus. Eucalyptus globules, also known as Blue Gum, are a major source of eucalyptus oilused worldwide.

ISSN No:-2456-2165

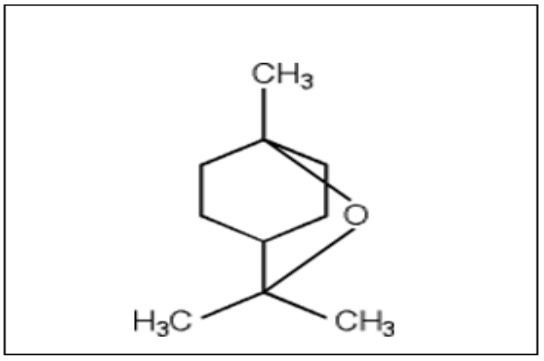

Fig 1. Eucalyptol

Eucalyptol is an organic compound with a formula: (structure). It is a major component of Eucalyptus globules oil. Nature has been a source of healing agents for thousands of years. More recently, research has been done on medicinal plants around the world. The plants were used to treat disease years ago before the use of the latest clinical drugs. Such medicinal plants are also recognized as having medicinal properties or as a precursor to useful drugs. More than 50% of these synthetic drugs come from natural products. These natural products play an important role in drug development. With the increasing use of chemicals, many antibiotic antibiotics have developed resistance to them; which is why there is a great need to develop a new anti-agent with improved performance and comprehensive applications. Certain extracts from plants have shown antimicrobial properties and have been studied to be used as agricultural chemicals with excellent antibacterial activity. Essential oils from the Myrtaceae family show a variety ofbiological functions such as bacteriostatic, fungi static and anti-inflammatory effects. Eucalyptus is one of the most important lists of the Myrtaceae family, a large evergreen tree and some 700 species of shrubs. Although many plants of this genus have their origins in Australia and Tasmania, these have always been grown in many other countries, including Tunisia and used for its various properties. About 500 species of eucalyptus produce essential oils. Eucalyptus is highly valued for its wood and is a good source of protein, tannins, and dye although eucalyptus oil is a very important product. The oil can easily be wasted on its leaves. Eucalyptus oil is exported to many countries such as China, India, South Africa, Portugal, Brazil and Tasmania in terms of trade. Another name for this plant is "red forest", which was traditionally used to treat wounds, abscesses, and other ailments. The leaves can only be found on trees planted to produce oil. Eucalyptus is known as a good source of many natural substances that exhibit activities that are resistant to a few microorganisms. Various flexible phytochemicals such as isoprenoids found in eucalyptus leaves indicate a number of medicinal / antibacterial properties. Eucalyptus extracts are approved as food additives and are currently used in the manufacture of various cosmetics. Saponins, tannins, steroids and flavonoids are found in eucalyptus leaf extract. Alkaloids and flavonoids have antimicrobial activity. Traditionally, eucalyptus leaves have been used to heal wounds and fungal infections.

Eucalyptus leaves show many activities such as antioxidant, antiseptic and anti-inflammatory [8].

Fig 2. Eucalyptus Leaves

F. Synonyms

Eucalyptus, Stringy Bark Tree, Blue gum, Blue Gum Tree.

G. Biological Source

Eucalyptus oil is an essential oil found in the filling of new leaves of Eucalyptus globulus and otherspecies such as E. *polybractea*, *E. viminalis*, and E. *smithii*, belonging to the Myrtaceae

H. Geographical Source

It is widely available in Australia, Tasmania, the United States, Spain, Portugal, Brazil, North and South Africa, India, France, and Southern Europe.

ISSN No:-2456-2165

I. History

Eucalyptus globules have been used since ancient times for the common cold. The leaves and their preparations have been used successfully as a tonic, stimulant, stomach, dyspepsia, stomach catarrh, typhoid fever, asthma, cough, etc. It has recently been recommended as a diuretic in diuretic treatment fordropsy.

J. Features

Eucalyptus is a tall, evergreen tree, stem that grows to an altitude of 1,000 feet [300 m] or more, and is covered with peeling bark. The leaves of the young plant, up to five years old, are contrasting, soft, oblong, straight, and blue-gray. The mature leaves are alternate, petiole, leathery, and scimitar-shaped. The flowers are single and white, with no leaves.

Eucalyptus oil is a colorless or grass-colored liquid, with a pleasant aroma and taste, which dissolves in the weight of the alcohol. According to the British Pharmacopoeia Eucalyptus oil should not contain less than 55%, with Eucalyptol volume, having a certain gravitational force of 0.910 to 0.930, and optical rotation of -10 degrees to 10 degrees.

K. Chemical Properties

Eucalyptus oil contains volatile oils where 70 to 85% 1, 8-cineole is also known as eucalyptol. Other active compounds are p-cymene, α-pinene; a small amount of sesquiterpenes such as ledol, aromadendrene; aldehydes, ketones, and alcohol. It also contains polyphenolic acids such as ferulic acid, caffeic acid, gallic acid; flavonoids such as eucalyptin, hyperoside and rutin.

L. Uses

Oils are used as a stimulant, antiseptic, flavor agent, fragrant, deodorant, expectorant, antimicrobial, febrifuge, diuretic, and antispasmodic. It is also used in the treatment of lung diseases, sore throats, colds, as a means of relieving asthma and various respiratory diseases and bronchitis [9]

M. Peppermint

Fig 3. Peppermint Leaves

N. Synonym

Brandy Mint.

O. Biological Source

The oil is obtained by refining the *Mentha piperita*, which is part of the Labiatae family.

P. Geographical Source

It is widely found in Europe, the United States, and the wetlands of England

Q. Cultivation And Collection

Peppermint thrives in a warm, preferably wet, well-drained, deep soil filled with humus. Peppermint will grow successfully, once it has started to grow and is carefully planted. The most common method of plowing is to dig runners in the early spring and spread them in shallow furrows, three feet apart in well- prepared soil. The growing plant is well kept and free of weeds and in the summer when the plant is fully flowering, the mint is cut by hand and milled with grass. Half of the finished vegetables will be dried and used for cattle feed.

R. Features

Leaves soon and clearly decorated, 2 inches long and 3/4 to 1.5 inches wide. Gens with small teeth, with smooth upper and lower extremities The stems are 2 to 4 feet high, usually purplish in color. The flowers are reddish-violet, located on the axils of the upper leaves, forming open, distorted spikes. This plant hasa unique aroma and when applied to the tongue has a hot, aroma at first and then produces a cold sensation in the mouth caused by the menthol in it. The oil is not a colorless, yellow or green liquid the hot aroma and aroma of camphor. In its keeping it becomes larger and redder but grows flattering or stored for 14 years

ISSN No:-2456-2165

S. Chemical Properties

The main component of Peppermint oil is Menthol, as well as other nutrients such as menthyl acetate, soverlerate, menthone, cineol, inactive pinene, limonene, and other less important metals. Menthol cools when cooled to a low temperature (-22 ° C). Flavor properties of the oil are due to both the ester and the alcohol components, while the therapeutic value is defined only by the components of the alcohol. English oil contains 60 to 70% Menthol; Japanese oil contains 85%, and Americans only 50%.

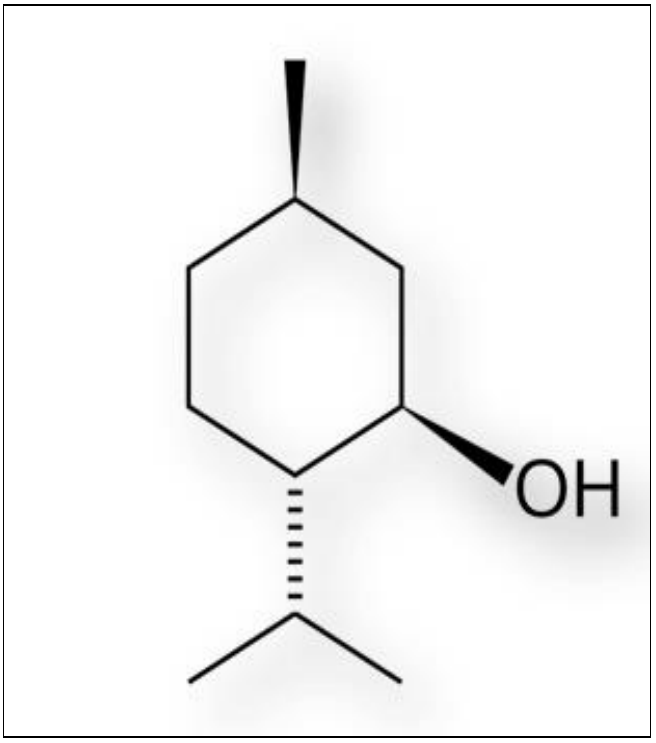

Fig 4. Peppermint

T. Uses

It stimulates, stomachic, carminative, inflatulence, and colic; in some dyspepsia, sudden pain, abdominal pain and diarrhea and diarrhea. Peppermint oil eliminates illness and nausea, as children enjoy. Peppermint is good for helping to raise the internal temperature and make you sweat. It is also used in cases of hysteria and neurological disorders. [10]

ISSN No:-2456-2165

CHEPTER TWO
NEED FOR STUDY

The purpose of using an aftershave is to re-hydrate the skin once you have shaved, quite literally after the shave. This is because shaving can dry out the skin and cause it to feel tight and even a little prickly. Thatuncomfortable feeling is caused by a lack of moisture in the skin. In years gone by, men would slap a bit of cologne on their faces and call that an “aftershave”. You can also add bad skincare to the list. Not only is it a needlessly painful way to start the day but alcohol actually dries out the skin adding to a feeling of post shave discomfort. Today we understand that we have to be more gentle and caring to our skin, especially if it’s freshly shaved, by adding moisture back with a hydrating formula to leave the skin feeling soft, soothed and moisturized.

ISSN No:-2456-2165

CHEPTER THREE
AIM AND OBJECTIVE

A. Aim

The aim of the present work was to formulate the after shaving gel by using Eucalyptus andPeppermint oil.

B. Objectives

- To formulate & evaluate the after shaving gel with minimum cost.
- To understand the properties of herbal extract of eucalyptus & peppermint.

C. Plan Of Work

- Literature survey
- Selection of drugs and excipients
- Preformulation study
- Design of formula for after shaving gel
- Formulation of after shaving gel
- Evaluation of after shaving gel Organoleptic properties Physical appearance pH Spreadability

ISSN No:-2456-2165

CHEPTER FOUR
REVIEW OF LITERATURE

- Tim j et al.(2020) The aim of this work to formulate the after shave gel by using different herbal plant extract. It is eco-friendly topical formulation it mainly contain mint oil, peppermint oil which provide cooling sensation to the skin.
- Patel VS et al.(2014) In this study studies the various topical cosmetic, like cream lotion and gel by using different herbal plant extract. It mainly contains the Eucalyptus hydroalcoholic extract which provides the antiseptic properties of skin. The formulation was evaluated for its antiseptic and antimicrobial activity.
- Sohani SK et al.(2020) In this study they mention formulate the after shave lotion, cream and gel. It mainly contains peppermint oil and mint oil which provide cooling sensation to the skin. The formulation was evaluated for its antiseptic activity.
- Surydevara V et al.(2013) Much attention has been given to formulate and evaluated the Carbopol of thickening agent and it's property. Formulate various gel .
- Aher et.al.(2015) Ami of this work was to formulate and evaluate the Peppermint oil, Peppermint oil Extraction prosses and its physical Property.
- Moghimipour et al.(2010) Formulation of an Anti-dermatophyte cream from Hydro-alcoholic extract of Eucalyptus Camaldulensis Leaves, Extraction process of Eucalyptus in Hydro-alcoholic extraction.
- Neelima K et al.(2014) A review of topical ingredients in cosmaceutical. Formulation and evaluation of cosmacutical products. Topical ingredients in cosmacetical which gives the better effect on skin.
- Haque A et al.(2010) Overview on evaluation and formulation of shaving media, complete there formulation with the rose oil which gives good fragrance to shaving media and suitable for the shaving media.
- Sen DJ et al.(2017) Study on Aftershave: a truth behind iconic fragrance, result is The safety of Aftershave Lotions is established by selection of ingredients that are safe and suitable for this

ISSN No:-2456-2165

CHEPTER FIVE
MATERIAL AND METHODS

A. Material

Ingredients	Role
Ethanol	Preservative
Water	Solubilizer
Carbopol 940	Gelling agent
Eucalyptus	Antiseptic
Peppermint	Cooling sensation
Glycerin	Humectant
Rose oil	Fragrance

Table no. 1: Ingredients and quantity

- Ethanol

Ethanol is a common ingredient in many cosmetic and cosmetic products. It acts as an astringent to help cleanse the skin, as a barrier to lotions and to help ensure that the ingredients do not break down, and ithelps the hairspray to adhere to the hair. Because ethanol is effective in killing germs such as bacteria, fungi and bacteria, it is a common ingredient in many hand sanitizers [11]. The U.S. The Centers for Disease Control and Prevention (CDC) recommends the use of hand cleaners in cases where soap and water are not readily available. Practicing hand hygiene is also an important part of helping to stop the spread of COVID-19. Using hand sanitizers or hand rubs (ABHR) can help disable SARS-CoV-2, a type of coronavirus that causes COVID-19. Ethanol is a natural product of plant fermentation and can be produced by the addition ofethylene [12].

- Water

Water is the most common ingredient in cosmetic products, often appearing first in the list of ingredients. Depending on the category of product, average beauty products can contain anywhere from 60% to 85% water.

Water has been called the 'solvent universal' in cones. In combination with emulsifiers, water can be mixed with 'thick' ingredients, such as butter and oil, to facilitate the formation of emulsions used toform creams, lubricants, and gels. Water also plays a key role in the production and production of many natural resources, sometimes combined with other solvents such as ethanol.

- Carbopol 940

Carbopol is a water-soluble polymer, which is used as an emulsifying, stabilizing, stabilizing, thickening in many industries and is used as a grinding agent after shaving gels and other products. Carbopol is found in several different categories, widely used in cosmetics and cosmetics, including gels, creams and cosmetics, detergents, and air conditioners. The gelling effect is activated in two phases, the first dispersing and hydration of Carbopol, and the second "neutralizing" the solution by adding chemicals that increase the pH. Neutral agents include triethanolamine (TEA) [13].

- Eucalyptus

As Eucalyptus has properties that help fight dandruff, improve blood circulation, and eliminate any inflammation or fungal attacks on the skin, it retains its integrity to promote significant hair growth. Its cool and cool effects reduce even stress, which is often cited as one of the most common causes of hair loss. It provides the nutrients and nutrients needed for healthy hair growth.

As mentioned in the brief English history shown at the beginning of this article, this ingredient has the potential to kill germs and start wound healing for many years. When using oils, it is important to cleanthem thoroughly before removing any

germs. Minor injuries, scratches, or abrasions can benefit from these oils and keep them away from any disease attacks as they contain anti-bacterial and anti-bacterial components.

- Peppermint

"Peppermint oil naturally cleanses the skin and has antibacterial and antibacterial properties. It has a cooling effect that relieves irritation and inflammation due to acne," peppermint oil can be a real skin preservative if used properly. It has a skin-lightening properties and a cool feeling [14].

The use of peppermint oil can also serve as part of the fragrance of cosmetic and skin care products. However, research has found peppermint oil to provide a cooling feeling that can help create a cooling effect on sensitive and uncomfortable skin. Peppermint oil mainly contains menthol and menthone, followed by nutrients such as pulegone, menthofuran, and limone. It can be found in rinse-off formulations with a concentration of 3% or less [15].

- Glycerin

After water and odor, glycerin is one of the most commonly reported ingredients in mammals. It is also a great ingredient in moisturizers, lotions and gels. The safe use of glycerin is growing in popularity but there are things consumers should be aware of when choosing to do this. Studies show that glycerin can have a positive effect on your skin in many ways. Glycerin, also known as glycerol, is a natural compound found in vegetable oils or animal fats. It is a clear, colorless, odorless, and sweet-smelling liquid. Glycerin is a humectant, a type of moisturizing agent that draws water to the outer part of your skin from the deeper levels of your skin and air [16]. According to a reliable research source (2016), glycerin is “the most effective humectant” available to increase water flow to the upper layer of your skin. In skin care products, glycerin is often used with an occlusive, another type of moisturizing agent, to soothe the skin.

- Rose oil

First and foremost, Pure Rose Oil is an antiseptic. This is one of the reasons why it works so well on acne- prone skin. It can nourish and disinfect the skin. It is so effective that it is also used to treat scars and other skin imperfections [18]. Natural, pure Rose Oil contains more than 50 beneficial compounds on the skin. These naturally occurring molecules cannot make it into a lab. Therefore, synthetic Rose Oil (also known as Artisan oil) has absolutely no benefits on the skin (smells just like roses). In addition, pure Rose Oil (steam distilled from the leaves of the Bulgarian Rosa Damascena) is plentiful. Richer in these nutrients are cheapernatural varieties such as Rose Hip Oil (produced from Rose buds from any rose tree) or Rose Absolute Oil(a solvent extracted from Rose oil) and other cheaper alternatives [19].

B. METHODS

C. Preformulation Research

Preliminary testing is the investigation of the physical and chemical properties of a substance alone and when combined with auxiliary substances. It is the first step in the logical development of volume forms. These studies should focus on those physicochemical structures of the new compound that may have an impact on drug performance and the development of an effective dose form. A complete understanding ofthese structures may ultimately give a reason for the architectural design.

D. How to prepare herbal extract

- The cold maceration process is used for the preparation of herbal extract.
- Collected plants of eucalyptus leaves are washed in water and dried under direct sunlight for three consecutive days after which they are mixed into a separate powder.
- 20 grams of strong powdered leaves and flower petals are immersed in 100 ml of ethanol 99.9% v / v and stored for maceration separation for approximately 3-4 days with occasional shaking.
- After maceration the extract is filtered using Whatman and 1 and the filtrate was collected and stored in therefrigerator.
- The extract is used to make the gel after shaving.

E. Qualitative Methods

The phytochemical tests were performed by the methods given by Harborne, 1973.

- *Foam Test:* Two ml extract was dissolved in 3ml distilled water and shaken vigorously. A stable top layer of foam was formed, indicating the presence of Saponins in the sample.
- *Hanch test:* Two ml extract was taken in a test tube .one ml of concentrated H2SO4 was added from theside walls of the test tube and the formation of a brown ring suggested the presence of carbohydrate .
- *Tannin test:* To 0.5ml of extract solution one ml of water and 1-2drops of ferric chloride solution wasadded .blue Colour was observed for Gallic tannins and green black for catecholic tannins.
- *Phenols test:* in two ml of extract, a pinch of ferric chloride was added .appearance of green Colourindicates the presence of phenol.
- *Protein test:* Two ml of extract was taken, and one to two drops of nitric acid was added development of yellow Colour indicates the presence of proteins.
- *Quinone test:* two ml extract was taken, few drops of concentrated H2SO4 were added and Appearance ofred Colour indicates the presence of quinones.

ISSN No:-2456-2165

- *Fat test:* the extract was tapped on the filter paper .appearance of oil on the filter paper .appearance of oil on the filter paper showed the presence of fat in the extract of eucalyptus.

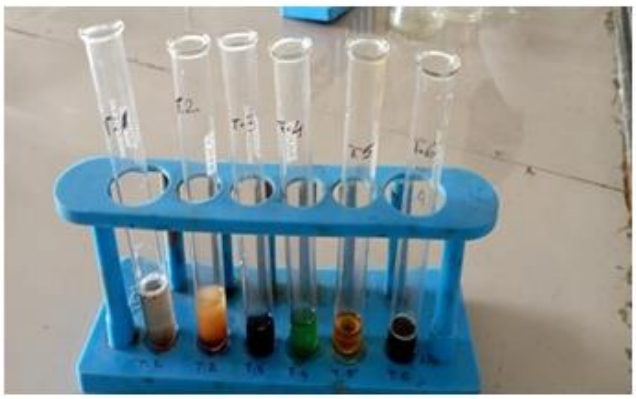

Fig no .05 Test no 1.2.3.4.5.6.

Fig no .06 Test no 7How to prepare the gel after

F. Shaving

- Measure everything
- Dilute the perfume and peppermint oil in ethanol and add it slowly in plenty of water.
- We distributed Carbopol 940 and Eucalyptus Hydro-alcoholic extracted from an intoxicating solution ofaqueous.
- Reduce the speed of the mixer.
- Slowly add melted glycerin to a small amount of stored water.

ISSN No:-2456-2165

CHEPTER SIX
RESULT AND DISCUSSION

Ingredients	**Quantity**			
	F1	**F2**	**F3**	**F4**
Ethanol	44.1ml	42.1ml	43.1ml	43.1ml
Water	50.1ml	50.1ml	50.1ml	50.1ml
Carbopol 940	1ml	1ml	1ml	1gm
Eucalyptus	1gm	2gm	1gm	2gm
Peppermint oil	1gm	2gm	2gm	1gm
Glycerin	0.8gm	0.8gm	0.8gm	0.8gm
Rose oil	q.s.	q.s.	q.s.	q.s.

Table no.2: List of ingredients and Quantity

A. Evaluation parameter

- Organoleptic properties

Appearance	Smooth
Colour	Greenish
Odour	Pleasant

Table no.3: Organoleptic Properties

Fig no.07 prepared gel

Fig no.08 pH reading

Determination Of Ph:

Calibration Of Ph Meter

pH 7

pH 9 . 2

- Result

The pH of cream wasfound to be 6.69

B. Determination Spreadability

The Spreadability of gel was determined Spreadability apparatus. The process was carried out by placed 0.5gm of gel on fix glass slide and movable glass slide was kept over it which is attached with weight (50gm) via string. Time taken by upper slide to extend from the initial point was

Measured and Spreadability was determine by using formula,S = M x L /T Here, S = Spreadability
M = weight tide 50gm with upper slideT = time taken to move slide L = length of gel spread on slide
S = 50 x 4.5 / 36.4
S = 6.18 g.cm/sec

- *Result* Spreadability of gel was found to be 6.18 g.cm/sec

C. Determination of Viscosity

The viscosity of individual and after shaving gel Was measured by Brookfield rheometer(LV DV III ULTRA) at 100 rpm.

ISSN No:-2456-2165

D. Analysis Result

Sample Ref. ID	**Viscosity (in cp)**
F1	**43491**

Tab no .04: Result of viscosity

Fig no 09 viscosity reading

ISSN No:-2456-2165

CHEPTER SEVEN
CONCLUSION

The gels are gaining more popularity today because they are more stable and can provide a controlled release than other semisolid preparations such as cream, ointment, paste, etc. The composition of the gel can provide better absorption characteristics and thus increase the bioavailability of the drug. An in-depth study of the long-term stabilizing properties of the gel can give a broader application of its therapeutic properties topatients. As Gel contains Eucalyptus extract which provides anti-cooling effect on the skin while peppermintacts as a wound healer. After all the F1 composition tests show good results, among all the formats so selected. From the results of the current study it can be concluded that after shaving the gel will be some better and co-friendly and less expensive method than synthetic gel. Lastly, we hope the current research could be a better reference for people and researchers working on cosmetic products for topical care.

Fig no 10 Final product

A. Expected outcome

After shaving gel are generally compatible very effective in terms of ease of manufacture and also economical. These have fewer side effects, after shave gel will be better eco-friendly alternatives with cost effective manner over synthetic gel, so in future this research work is promising approach to cosmetic industry.

REFERENCES

[1]. Sen DJ, Aftershave: a truth behind iconic fragrance. World j. Pharm. Chem. 2017;5(4):101-103.
[2]. Tim j, Marcos D, Chin W. Formulation and evaluation of after shave gel. Arabian.J. Pharm. Sci. 2020; 9(3):202-207.
[3]. Hema P, Chandra PK, Rao BA, Kumari AS. A review of after shave lotion. Int. J.Pharmacy and Anal Res. 2017;6(3):442-448
[4]. Bhakar N. Gels in Pharmaceuticals: Types of gels and standard test. Int. J.Pharm.2018; 44(9):453-455.
[5]. Rathod HJ. A review of pharmaceutical gel. Int. J. Pharm. Sci. 2015; 1(1):654-659.
[6]. Tripathi P. Shaving media used in cosmaceutical science. Tattradon letters. 2005;12(4):155-157
[7]. Joseph N. The health benefits of eucalyptus. England j. Medical Science. 2016; 43(2) 788-790.
[8]. Kaur M. Phytochemical analysis of eucalyptus leaves. Nature Rev. Drug Disc. 2014 ;6(12):878-880.
[9]. Sharma D, Dhole M. Pharmacognosy and phytochemistry: eucalyptus oil. Chinese J.Chem. 2013; 45(1) 109-111.
[10]. Gill BM, Kaur P, Sharma M. Pharmacognosy and phytochemistry: peppermint oil.Chinese J. Chem. 2016; 15(8) 229-231.
[11]. Patel VS, Pandya SS. Method of evaluating cosmetic shaving media. Indian J.Pharm. Sci & Res. 2014;5(4):1290-1294.
[12]. Sohani SK, Kumar R, Akhtar M, Chanda R, Chawala G. Formulation and evaluationof after shave lotion, gel, cream. Int. J. Farmacia. 2020;7(4):236-256.
[13]. Wankhede SB, Tajane MR, Gupta KR, Wadodkar SG. Roll of carbopol in shavingmedia. Indian J. Pharma Sci. 2007;69(2):298-300.
[14]. Surydevara V, Rao BV, Koduri T, Adimulan LR. Roll of different vehicles inshaving gel. Turk. j. Pharm Sci. 2013;10(2):255-262.
[15]. Aher SS, Saudagar RB, Kothar H. Method of preparation of mint oil: overview. Int. J. J. Pharmacy & Pharm Sci. 2014;6(6):237-242.
[16]. Naazneen S, Sridevi A. Review on sheving gel. Int. J. Pharma Res Schol.2015;4(4):1-8.
[17]. Wilkinson JB, Moore RJ. Harry"s Cosmaticology, 7 th edition. (Singapore). No.156-187.
[18]. Neelima K, Rajendra Y. A review of topical ingredients in cosmaceutical. Indian J.Pharm. Sci & Res. 2014;5(4):124-129.
[19]. Haque A, Nazin A. Evaluation and formulation of shaving media: on overview. Dhaka Univ.J. of Pharm. Sci. 2010;9(2):131-138.
[20]. Moghimipour ., Ameri A, Saudatzadeh A, Salimi A, Siahpoosh A. Formulation of an Anti- dermatophyte cream from Hydro-alcoholic extract of Eucalyptus Camaldulensis Leaves. J. Natural Pharm.Products.2010;13(3):234-238
[21]. .Shubhreet kaur, Dr.saurabh gupta, Priyae Brath Gautam. Phytochemical analysis of eucalyptus leaves extract .2019;8(1):2443.