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REVIEW ON COSMETICS SCIENCE PREPARATION AND EVALUATION OF SHAVING CREAM

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ABSTRACT :

There are many factors effect on the shaving cream performance and these factors are the composition of the cream itself where any change in the percentage of this composition can cause a change in its performances. So that to identify the main factor effects on the shaving cream a screening design had been carried out, as shown above it had been found from pareto diagram that stearic acid and T.E.A
main factors effect on the shaving cream characteristic (where pH& viscosity had been measured). Stearic acid was found to be the effective factor on viscosity. The T.E.A affects the pH and if it's increased the pH of shaving cream will be increased as well.

Milarly talking about shaving cream, the pH the sample Slightly acidic which is favourable for our skin. The next Important factor when it comes to shaving cream is foam. Foam plays a vital role in wetting the beard and smooth flow Of razor over the skin.

Absorption Rate is also a deciding Factor for shaving cream. It is very important that the Shaving cream is quickly absorbed by the skin.
Similarly the hair conditioner was the thick opaque liquid. The pH of the sample is acidic. This sample develops a little Lather when worked into wet hair and contribute to the Conditioning effect, reducing the friction between hair Strands.

KEYWORDS : Cosmetics, cream,Preparation,

Introduction:-

1) Introduction to cosmetics industry, Overview of Drug and Cosmetics Act 1940 and 1945

According to Schneider et al. (2001), cosmetics products are mixtures of natural or synthetic chemical compounds used to improve the appearance or smell of the human body. Thompson (1989) defined cosmetics as an item intended to be rubbed into or otherwise applied to the human body or any part for cleaning, beautifying promoting attractiveness or altering the body appearance, Ahaiwe et al. (2015). They include a range of products such as creams, lotions, powders, perfumes, lipsticks, fingernail and toenail polish, eye and facial make-ups, permanent waves, hair colours, hair sprays and gels and deodorants. Cosmetics are believed to enhance the best features and cover the blemishes on the person wearing them. They have been in use since ages and constitute an important part of modem day's life, (Shalom et al. 2013; Ahaiwe et al. (2015).

In the modern world, there is a distinct change in lifestyle, demographics and the ever-increasing importance of social status. Many people are becoming more health and beauty conscious Suchitra

With the evident growth of the cosmetics, beauty and health industries, there is an obvious increase in general awareness of beauty as well as an increase in the use of cosmetic productsIn ancient time the written information on ayurveda like charakasamhitha and varnyakashaya has explained the usage of herbs in getting glowing complexion. The herbs used were chandana, nagkeshara, padmak, khus, yashtimadhu, manjistha, sariva, payasya, seta (swetadurva) and lata (shyamadurva). These

ayurvedic herbs are used to purify blood and eliminate vitiated doshas like (vata, pitta, kapha) from the body as they are mainly responsible for skin disorders and other diseases. The herbs mentioned in khushthagnamahakashaya effective in skin disorders, include khadira, abhaya, amalaki, haridra, bhallataka, saptaparna, karavira, vidanga and jati. Some of the natural products used in ancient times include

The most practical definition of this term may be - a cosmetic product that is purported to have therapeutic action capable of affecting the skin positively beyond the time of its application. Although the term cosmeceutical is steeped in dermatology literature and dominates academic discussions, symposia, and lectures around the world, it is strangely interesting that almost four decades after coining the term, this category of skincare products is still not formally recognized by the United States Food and Drug Administration (US-FDA) or the European Union. This disparity stems from the differentiation between 'cosmetics' and 'drugs' by the Federal Food, Drug, and Cosmetic Act (FD&C Act) based on their intended use and ability to affect the structure and function of the cutis. Both in the United States and the European Union, a drug is defined as "an article intended for the use in the diagnosis, mitigation, treatment or prevention of disease or intended to affect the structure or any function of the body." In contrast, the FD&C Act 193defines cosmetics as "articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into,

Cosmetics act 1940 and 1945:-

The Drugs & Cosmetics Act, 1940 and rules 1945 have entrusted various responsibilities to central & state regulators for regulation of drugs & cosmetics. It envisages uniform implementation of the provisions of the Act & Rules made there under for ensuring the safety ,right sand wellbeing go the patients by regulating the drug sand cosmetics . CDSCO is constantly thriving upon to bring out transparency, accountability and uniformity initsservicesin order to ensure safety,efficacy and quality of the medical product manufactured, imported and distributed in the country.

♦ **SECTIONS :-**

1. Short title, extent and commencement.

2. Application of other laws not barred.

A3. Definitions.

3A. Construction of references to any law not in force or any functionary not inexistence in the State of Jammu and Kashmir.

4. Presumption as to poisonous substances.

THE DRUGS TECHNICAL ADVISORY BOARD, THE CENTRAL DRUGS LABORATORY AND THE DRUGS CONSULTATIVE COMMITTEE :-

5. The Drugs Technical Advisory Board.

6. The Central Drugs Laboratory.

7. The Drugs Consultative Committee.

7 A . Sections 5 and 7 not to apply to Ayurvedic, Siddha or Unani drugs. IMPORT OF DRUGS AND COSMETICS :-

8. Standards of quality.

9. Misbranded drugs.

9A. Adulterated drugs.

9B. Spurious drugs.

9C. Misbranded cosmetics.

9D. Spurious cosmetics.

10. Prohibition of import of certain drugs or cosmetics.

10A. Power of Central Government to prohib it import of drugs and cosmetics in public interest.

11. Application of law relating to sea customs and powers of Customs officers.

12. Power of Central Government to make rules.

13. Offences.

14. Confiscation.

15. Jurisdiction.

MANUFACTURE. SALE AND DISTRIBUTSION OF DRUGS AND COSMETICS :-

SECTIONS

16. Standards of quality.

17. Misbranded drugs.

17A. Adulterated drugs.

17B. Spurious drugs.

17C. Misbranded cosmetics.

17D. Spurious cosmetics.

17E. Adulterated cosmetics.

18. Prohibition of manufacture and sale of certain drugs and cosmetics. 18A.

Disclosure of the name of the manufacturer, etc.

18B. Maintenance of records and furnishing of information.

19. Pleas.

20. Government Analysts.

21. Inspectors.

22. Powers of Inspectors.

23. Procedure of Inspectors.

A24. Persons bound to disclose place where drugs or cosmetics are manufactured or kept.

25. Reports of Government Analysts.

26. Purchaser of drug or cosmetic enabled to obtain test or analysis.

26A. Powers of Central Government to regulate, restrict or prohibit manufacture, etc., of aadrug

and cosmetic in public interest.

26B. Powers of Central Government to regulate or restrict, manufacture, etc., of drug in public interest.

27. Penalty for manufacture, sale, etc., of drugs in contravention of this Chapter.

27A. Penalty for manufacture, sale, etc., of cosmetics in contravention of this Chapter.

28. Penalty for non-disclosure of the name of the manufacturer, etc.

28A. Penalty for not keeping documents, etc., and for non-disclosure of information. 28B. Penalty for manufacture, etc., of drugs or cosmetics in contravention of section 26A.

29. Penalty for use of Government Analyst's report for advertising.

30. Penalty for subsequent offences.

31. Confiscation.

31A. Application of provisions to Government departments.

32. Cognizance of offences.

32A. Power of Court to implead the manufacturer, etc.

32B. Compounding of certain offences. 33. Power of Central Government to make rules. 33A. Chapter not to apply to Ayurvedic, Siddha or Unani drugs.

PROVISIONS RELATING TO AYURVEDIC, SIDDHA AND UNANI DRUGS :-

33B. Application of Chapter IVA.

33C. Ayurvedic and Unani Drugs Technical Advisory Board.

33D. The Ayurvedic, Siddha and Unani Drugs Consultative Committee. 33E. Misbranded drugs.

33EE. Adulterated drugs.

33EEA. Spurious drugs.

33EEB. Regulation of manufacture for sale of Ayurvedic, Siddha and Unanidrugs.

33EEC. Prohibition of manufacture and sale of certain Ayurvedic, Siddha and Unani drugs. 33EED. Power of Central Government to prohibit manufacture, etc., of Ayurvedic,Siddha or Unani drugs in public interest.

33F. Government Analysts.

33G. Inspectors.

33H. Application of provisions of sections 22, 23, 24 and 25.

33-I. Penalty for manufacture, sale, etc., of Ayurvedic. Siddha or Unani drug incontravention of this Chapter.

33J. Penalty for subsequent offences. 33K.

Confiscation.

33KA. Disclosure of name of manufacturer, etc.

33KB. Maintenance of records and furnishing of informantion. 33L.

Application of provisions to Government departments.

33M. Cognizance of offences.

33N. Power of Central Government to make rules. 33-

O. Power to amend First Schedule.

MISCELLANEOUS :-

33P. Power to give directions.

34. Offences by companies.

34A. Offences by Government departments.

34AA. Penalty for vexatious search or seizure.

35. Publication of sentences passed under this Act.

36. Magistrate's power to impose enhanced penalties. 36A.

Certain offences to be tried summarily.

36AB. Special Courts.

36AC. Offences to be cognizable and non-bailable in certain cases.

36AD. Application of Code of Criminal Procedure, 1973 to proceedings before special Court. 36AE. Appeal and revision

37. Protection of action taken in good faith.

38. Rules to be laid before Parliament.

2) Conditions for obtaining license for import, manufacture, store and sale of cosmeceuticals:-

Sr. No.	Schedule	Description
1	First Schedule	Authorisation from manufacturer
2	Second Schedule Part-I	Information and undertaking required to be furnished by the manufacturer or his authorised importer or distributor or agent with the application form for import registration certificate.
3	Second Schedule Part-II	Information and undertaking required to be furnished by the manufacturer with the application form for grant of manufacturing licence or loan licence
4	Third Schedule	Fee payable for licence, permission and registration certificate.
5	Fourth Schedule	List of categories of cosmetics for import
6	Fifth Schedule	Fee for test or analysis by the Central cosmetics laboratories or by the state laboratories
7	Sixth Schedule	Undertaking for the import of cosmetics to be submitted by the importer with application form for Import Registration Number
8	Seventh Schedule	Good manufacturing practices and requirements of premises, plants and equipment for manufacture of cosmetics
9	Eighth Schedule	Manufacturing and raw material records
10	Ninth Schedule	Standards for cosmetics (BIS)
11	Tenth Schedule Part-I	List of colourants allowed for use in cosmetic products as given under IS: 4707 (Part 1) of BIS
12	Tenth Schedule Part-II	List of colours permitted to be used in soaps
13	Eleventh Schedule	Good laboratory practices and requirements of premises and equipment
14	Twelfth Schedule	Extent and conditions of exemption of various class of cosmetics
15	Thirteenth Schedule	Word "Cosmetics" is omitted from Drugs and Cosmetics Rules 1945

3) Documentation (Batch Formula Record, Master Formula Record, Quality Audit ReportDistribution :-

4.9 Treatment of product that is outside of specification A procedure for the handling of product that is out

of specification should be documented under the company's QMS and implemented.

Waste

Procedures for the segregation and handling of waste should be documented and implemented, including

the labelling requirements.

4.10 Subcontracting

Systems should be in place to ensure that a subcontractor is not used prior to their review and approval through the QMS.Technical/quality agreements should be put in place with contract service providers outlining the roles, responsibilities and communication processes with respect to the service(s) provided.Technical agreements should also be put in place with clients to whom the company provides a contract manufacturing service. These agreements should include the responsibilities of both parties with respect to the manufacturing, packaging, supply and distribution of cosmetic products. In such a scenario, it should be defined which party assumes the role of the responsible person for all cosmetic products for the European market and is therefore responsible for the documentation requirements of the product information file.

4.11 Deviations

KkA procedure for the handling of deviations should be documented under the company's QMS and implemented. The procedure should incorporate the principles of QRM and should provide for the identification and implementation of corrective and preventive actions (CAPA),

4.12 Complaints and recalls

Procedures for complaints and recalls should be documented and implemented under the company's QMS.

A list of all customers including contact details should be maintained so that in the event a recall is required there is full product traceability throughout the supply chain.

4.13 Change control

A procedure for change control should be documented under the company's QMS and should incorporate the principles of QRM. Arrangements should be in place for the prospective evaluation of planned changes and their approval, prior to implementation, taking into account updates to the product information file, where required. After the implementation of a major change, an evaluation should be undertaken to confirm the quality objectives were achieved and that there was no unintended deleterious impact on product quality.

4.14 Internal audit

A procedure for internal audit should be documented under the company's QMS.

4.15Documentation

All documents implemented under the company's QMS should be approved, signed and dated by authorised persons before being used. A procedure for QRM should be developed and implemented at the site

4) Review of the list of ingredients on the labels of cosmetics,

With respect to the evaluation of new suppliers, it is recommended that comparative analysis be conducted on different supplier lots of raw materials using the principles of QRM.

The company should engage with suppliers of key raw materials with the view to obtaining a certificate of analysis for each batch of raw material supplied. These should be included in the product information file as described in the HPRA Guide to Cosmetic Products for Responsible Persons located at www.hpra.ie.

Specifications for raw materials (including water) and packaging materials should be documented including defined acceptance criteria relevant to the quality of finished products.

Containers/bags of raw materials and packaging materials should be closed and sealed during storage to prevent contamination.

In circumstances where water is used in the manufacture of cosmetic products, consideration should be given to the water quality required and an assessment as to whether the raw town water should be tested on a periodic basis using the principles of QRM.

Appropriate arrangements should be implemented for tracking the usage of raw materials and packaging materials (e.g. stock cards).

5. Current Good Manufacturing Practices of cosmetics as per the regulatory authorities.:-

Good manufacturing practice (GMP) is that part of quality management which ensures that products are consistently produced and controlled to the quality standards appropriate to their intended use. GMP is concerned with both production and quality control. The basic requirements of GMP are that:

(i) All manufacturing processes are clearly defined, systematically reviewed in light of experience and shown to be capable of consistently manufacturing cosmetic products of the required quality and complying with their specifications.

(ii) Critical steps of manufacturing processes and significant changes to the process

are validated.

(iii) All necessary facilities for GMP are provided including:

- appropriately qualified and trained personnel

- adequate premises and space

- suitable equipment and services

- correct materials, containers and labels

- approved procedures and instructions, in accordance with the quality system

- suitable storage and transport

(iv) Instructions and procedures are written in an instructional formin clear and unambiguous language, specifically applicable to the facilities provided.

(v) Procedures are carried out correctly and operators are trained appropriately in these procedures.

(vi) Records are made, manually and/or by recording instruments, during manufacture which demonstrate that all the steps required by the defined procedures and instructions were in fact taken and that the quantity and quality of the product was as expected.

(vii) Any significant deviations are fully recorded, investigated with the objective of determining the root cause and appropriate corrective and preventive action implemented.

(viii) Records of manufacture including distribution which enable the complete history of a batch to be traced are retained in a comprehensible and accessible form.

(ix) The distribution of the products minimises any risk to their quality.

(x) A system is available to recall any batch of product, from sale or supply.

6. Study of ICH guidelines for stability studies.

The purpose of stability testing cosmetic products is to ensure that a new or modified product meets the intended physical, chemical and microbiological quality standards as well as functionality and aesthetics when stored under appropriate conditions.

Because the development cycle of cosmetic products is relatively short, and also, in order that the testing activity does not become economically disproportionate in view of the multitude of product launches each year, each manufacturer must have at their disposal tests that are adapted to their activity. Each manufacturer should design their

stability testing program such that it is reasonable and efficiently addresses the testing required.

This document aims to set out guidelines in order to predict and assure the stability of products in the market place. Its purpose is to aid manufacturers of cosmetic products in the selection and the refinement of the appropriate stability tests. Although this guideline can provide a helpful starting point, it is important that manufacturers carefully evaluate new products and technologies and, where appropriate, adapt their testing to reflect differences between product types and formulations.

However, all methods assuring the final stability of a cosmetic product against the categories cited in paragraph below, if it is at least equivalent to the recommendations of the following chapters, are considered as valid. Procedures must be put in place and documented within the manufacturer's internal system.

6. DESIGNING A COSMETIC STABILITY STUDY

A stability study should include the following considerations (each of which will be discussed in more detail later):

- **Identify tests that will "accelerate and predict" the effects of normal conditions of storage and use.**

Where relevant, consider stresses, including temperature, that will enable assessment of product integrity under anticipated product exposure conditions.

- **Consider evaluation of critical aesthetic properties such as color, fragrance, texture, and flow, particularly after exposure to conditions designed to stress each specific property.**
- **Consider variation in process conditions.**
- **Consider the impact of packaging on the contained product, as well as any effects which the product might have on the packaging.**

PREDICTING SHELF LIFE

There is very little generally-applicable published research to support specific accelerated methods for predicting cosmetic shelf life. Some of the reasons for this lack of information are:

- **The variety and complexity of cosmetic formulas and packaging.**
- **The proprietary nature of many products and stability test methods.**
- **The variety of types of changes that need to be examined, including**

physical, chemical, microbial, functional or aesthetic changes.

Module 2: Understanding basic concepts

1. Preparation of SOPs of different equipment :-

Purpose:
1.1.To provide a process where manufactured drug product (finished product) is visuallyinspected for both par ticulate and cosmetic/functional defects.
2.Scopeand Applicability:
2.1.All drug product manufactured for use in regulated studies.
3.Summary of Method:
3.1.Delivery of Product to Inspector(s)
3.2.Verification of Delivered Product.
3.3.Preparation of Delivered Product for Inspection
3.4.Inspection of Product – General
3.5.Inspection of Product – Process
3.5.1.Inspector examines each vial for the defects listed in the Finished ProductInspection Form. Defects shall be categorized into 3 categories:3.5.1.1.Critical
3.5.1.2.Major
3.5.1.3.Minor
3.6.Review of Inspection
3.7. Product Status/Storage Location
4.References:

USP <790> Visible Particulates in Injections4.3

USP <1790> Visual Inspection of Injections

5.Definitions:

5.1.**Critical**

- defects which may cause serious adverse patient reaction or death if the product is used. This classification i ncludes any non-
conformity that compromises theintegrity of the container and thereby risks microbiological contamination of the sterile product.

5.2.**Major**

- defects that carry risks of temporary impairment or medically reversiblereaction, or involve remote probabili ty of a serious adverse reaction. This classificationis also assigned to any defect which causes impairment to th e use of the product (whichmay result in a malfunctions that makes the product unusable).

defects which do not impact product performance or compliance; they are oftencosmetic in nature, affecting only product appearance and pharmaceutical elegance.Minor defects are not considered to be rejected produ ct.

Precautions:

6.1. None

7.2It is the responsibility of the operator/inspector to annually partake in eye exams.

7.3
It is the responsibility of the operator/inspector to notify QA of product defects exceedingAcceptable Quality L imit (AQL).

7.4

It is the responsibility of the Quality Assurance personnel to perform investigations offailed inspections exceed ing AQL.

8.Equipmentand Materials:

8.1.

A lighted non-
glare white/matte black inspection booth of suitable design andconfiguration to meet required light intensity r ange (2000-3750 lux) at the viewing point

.8.2.

A calibrated/traceable light meter at minimum at the commencement and completion ofthe inspection

.8.3.

Stickers with the appropriate defect code.

8.4.

Finished Product Inspection Form

9.Procedure: Inspection Process

9.1.Delivery of Product to Inspector(s

9.1.1.Operations personnel or designee delivers product to

inspector. 9.1.2.

Operations personnelor designee completes the following sections of the FinishedProduct Inspection Form

.9.1.2.1. Description

9.1.2.2. Batch Number

9.1.2.3. Lot

Numbe r9.1.2.4.

Quantity of Vials

9.1.2.5. Delivered By / Date

9.2.1. Inspector verifies that the quantity of vials delivered matches the numberindicated on the form.

9.2.2.

If the quantity matches, the inspector completes the "Received By/Date" portionof the Finished Product Inspe ction Form.

9.2.3.

If the quantity does not match, the Inspector contacts Operations personnel ordesignee to resolve the quantit y discrepancy.

9.3.

Preparation of Delivered Product for Inspection

9.3.1.

Product is staged in the "Product to be Inspected" area to the right of theinspection area in reach of the inspec tor. A second area is staged and labeledwith two areas on the left hand side of the inspector and labeled as "In spectedProduct - Good" and "Inspected Product Defects

.9.3.2.

Signs are posted as applicable to maintain segregation throughout the process

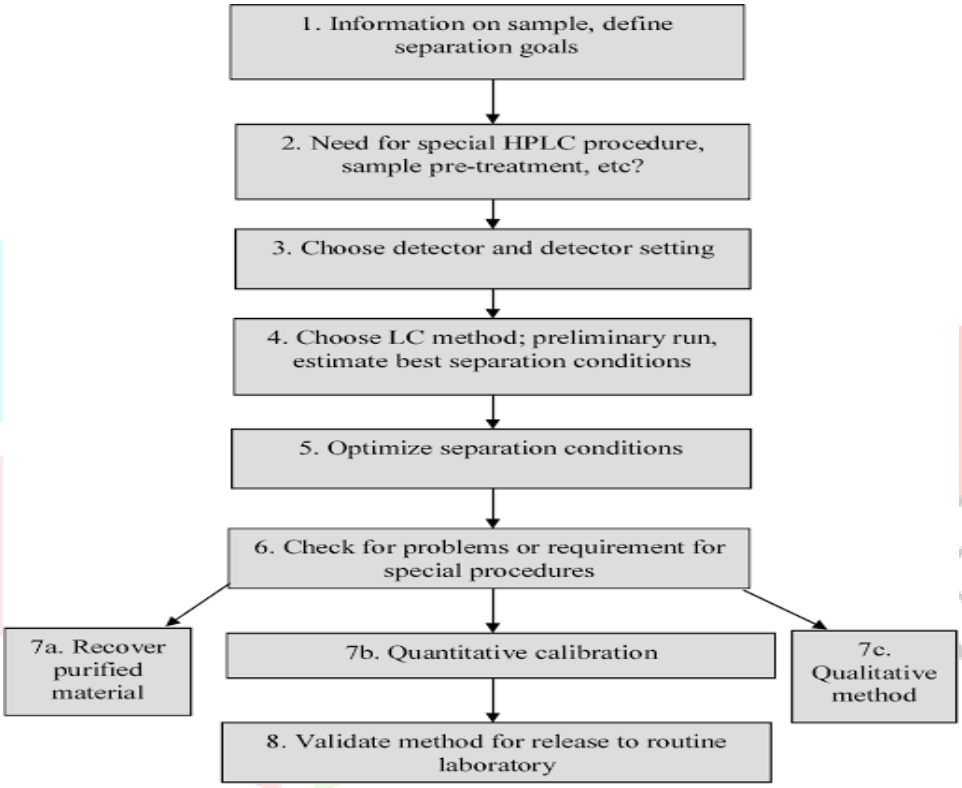
.9.3.3.

Only one (1) lot of product is allowed at the inspection booth at any one time

.9.4.

Inspection of Product General

9.4.1.Inspection of product shall take place utilizing a lighted



Module 3:

Experimental:-

1)Shaving cream :-

- **Introduction: -**

Shaving cream is applied to the skin to facilitate removal of hair. Shaving cream softens and moistens the skin and the hair, thus making shaving more comfortable and contributing to smoother skin.

Cutting process; swell keratin and desensitize skin.

Shaving Cream achieve three effects: lubricate the oils, soaps or surfactants and water. Shaving cream that are in tubes are commonly used with a shaving brush to produce a rich lather.

Later shaving cream is a man which is used for smooth my and condomable shave And woke up the skin rich and refresh afterwand. Shaving with raw without assistance of Cosmatic prepatation is pouble hecenainly less convenien. Is less feble Circumstance, shering cream can lead to discondort intation and actual physical damage of The skin. These harsh can benisisimd by the inligench of sharp.

Apparatus:

1. **Beaker**
2. **Balance**
3. **Water bath**
4. **Glass rod**
5. **Thermometer**
6. **Heater**
7. **Measuring cylinder**
8. **Container**

1) Ingredients:-

INGREDIENTS	AMOUNT (%)
Stearic acid	28
Coconut oil	12
Palm oil	5
Pot. Hydroxide	6.5
Sod. Hydroxide	1.5
Glycerin	10
Perfume	q.s
Preservative	q.s
Water to make	100

- **Formula Antiseptic after shave lotion:-**

- **Hyamine 0.25%**
- **Alcohol 40%**
- **Menthol 0.005%**
- **Benzocaine 0.025%**
- **Water.....59.72%**

- **Perfume.....q .s**

2) Experiment # 2:

Table (2): The ingredients of the second recipe are:

Ingredient	Weight	Function
Stearic Acid	15 g	Emulsifier
Oleic Acid	3 g	Surfactant
KOH solution	(3 g KOH+ 10ml H2O)	Base
Sorbitol	2 g	Emollient
Lauramine	4 g	Thickener
Propylene glycol	3 g	Humectants
Sodium Chloride	1 g	Thickener
Hot water	6 ml	Aqua's phase
SLS	3 g	Foaming agent
Glycerin	2 g	Humectants

- **Procedure:**
  1) **In main tank , add 15 g of Stearic Acid ,3 g Oleic Acid and KOH solution (KOH 3 g, H2O 10 ml) ,then heated to 70°C.**
  2) **In separate vessel 3 g SLS, 1 g NaCl and 6 ml hot water had been weight and melted and was added with mixing to main tank.**
  3) **3 gr of Propylene Glycol, 2 g Glycerin, 2 g Sorbitol and 4 g Lauramide was added with continuous mixing until it had starchy shape.**

- **Procedure :-**

These are non-lather shaving creams. They are oil in water emulsions. The product is similar to vanishing cream. Only difference is that it contains more of oils.

The brushless shaving creams are popular because of their convenience and thick film gives adequate lubrication and emolliency to skin. It causes less irritation of skin.

The beard softening property of brushless shaving cream is less. As such normally washing face with water and soap before application of brushless shaving cream is recommended.

Processing is carried out like any other cream. Oil phase and water phase are separately weighed and emulsified at higher temperature and then cooled.

After shave lotion consists of sample solution of ethyl alcohol and perfume. Alcohol strength may vary from 40 to 60%.

The main purpose is to act as soothing agent to skin which has been abraded by razor blade. Mild astringency and coolness is achieved by controlling ethyl alcohol concentration and addition of cooling agents like menthol etc.

Perfume addition in after shave lotion is very important as this brings in the feeling of frshness. Since alcohol content is lower, the perfume dispersion in after shave lotion is done with the help of Solubilisers like Tween or ethoxylated castor oil etc.

Small quantity of humectants are also included like sorbitol, glycerol.

Astringents like Zinc Sulphate, Alum etc are also included in certain formulations. Shaving Products being the most important part of Male Grooming, It will always be required and its demand will keep increasing

- **Category :-** Shaving cream
- **Storage :-** Store in well-closed package

Evalution Test of Shaving Cream :-

1. **Physical properties:-** The cream was observed for the color, odor and appearance.

2. **Washability:-** The cream was applied on the Skin surface and observed under the running water.

3. **pH:-** The pH meter was calibrated with the help of standard buffer solution. Weigh 5 gm of cream dissolved it in 50.0ml of distilled water and its p H was measured with the help of digital pH meter**.**

4. **Spread ability test :-** The cream sample was applied between the two glass slides and was compressed between the two-glass slide to uniform thickness by placing 100 gm of weight for 5 minutes then weight was added to the weighing pan. The time in which the upper glass slide moved over the lower slide was taken as a measure of spread ability.

5. **Irritancy test:-** Mark an area (1sq.cm) on the Skin dorsal surface. The cream was applied to the specified area and time was noted. Irritancy, erythema, edema, was checked if any for regular intervals up to 24 hrs. and reported.

Result :

Physical properties:- **The physical properties of formulated cream were judged by color, odor and texture.**

1. **Washability:-** The cream applied on skin was easily removed by washing with tap water.

2. **pH of Cream :-** The pH of cold cream was found to be 5.1 Which is good for skin.

3. **Spread ability test:-** The spread ability test showed that the formulated cream has good spreadable property.

4. **Irritancy test:-** The formulated cream shows no redness, edema, irritation and inflammation during studies. The formulated cream is safe to use.

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Absorption Rate is also a deciding Factor for shaving cream. It is very important that the Shaving cream is quickly absorbed by the skin.

Similarly the hair conditioner was the thick opaque liquid. The pH of the sample is acidic. This sample develops a little Lather when worked into wet hair and contribute to the Conditioning effect, reducing the friction between hair Strands.

2 Results of Shaving Cream :-

Tests	Prepared Sample	Std. Reference
• Absorption Rate (s)	31	20
• pH	6.25	5.8
• Surface Tension(dyne/cm)	13.67	12.84
• Foam content	900ml	1000ml

Conclusion:-

Indeed a very promising active component for new Functional eco-friendly cosmetic products. It has a proven

Immediate moisturization and skin barrier enhancing the Effect, making it an ideal emollient for a variety of

Applications within advanced skin care. The soft consistency, Combined with a high melting point, offers the formulator Many ways to optimize both skin feel and high temperature Stability without compromising long shelf life and attractive Appearance. Also it doesn't cause any harm to the Environment during disposing.

The good stability and the inherently good formulating Properties associated with Kusum Oil, in general, open up a Number of possibilities, extended by the variety of derived Products that can be obtained from this well researched raw Material.

Reference:-

- Pharmaceutical Inspection Convention, Pharmaceutical Inspection A Handbook of Cosmetics By,
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