

FORMULATION AND EVALUATION OF HERBAL COLD CREAM

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ABSTRACT

To formulate and evaluate herbal cold cream using Turmeric to give glowing & cooling effect. Methods: The cream was prepared by using the cream base that is bee's wax, liquid paraffin, borax, distilled water, rose oil. Cream was prepared & evaluated for different parameters like appearance, PH, viscosity, stability test, test for homogeneity, spread ability, smear test, evaluation of Emolliency & Test for microbial growth. The cream showed good appearance, PH, adequate viscosity and no phase separation was observed. Also, the formulation showed no redness, erythema and irritation during patch study and they were easily washable was stable at room temperature.

KEYWORDS:- Cold cream, Emollient effect, Consistency viscosity, Protective layer, Spreadability.



Aim:- "Formulation and Evaluation Of Herbal Cold Cream" Requirements.

A) Apparatus

Beaker, Evaporating dish, Tripod stand, Stirrer, China dish, Measuring cylinder.

B) Chemicals

White bees wax, Jojobo oil, Turmeric extract /powder, Neem oil, Coconut oil, powdered borax, Rose water.

INTRODUCTION

Cosmetics are the products which are generally used to beautify the skin & also to purify the skin. The cosmetic are the word derived from the greek word "kosmeticos" which means to "adorn, Beautiful, attractive".

Cold cream is the water in oil emulsion cold cream. Cold cream gives the prolonged contact time in the site of application as compared to the other semi-solid dosage form. The function of the cold cream is for restoring moisture to dry skin. They are non-irritating when applied on the skin.

The use of herbal products as cosmetics is as prevalent in modern era as it was in ancient times. Herbal cosmetics are mostly preferred because of their less or nil side effects when compared to synthetic products and show enhanced effects upon application.

These herbal cosmetics used as beauty products help in enhancing and conditioning properties of skin. The herbal extracts used in these formulations are all derived from natural plant sources without the use of any harmful synthetic drugs.

The herbs extracted by these systems show a number of properties like anti inflammatory, anti- bacterial, anti-septic, emollient and sometimes also show anti-cancer properties.

Thus, there is extensive use of herbal cosmetics in skin care systems and an ever increasing demand in the market. Various kinds of creams such as vanishing cream, cold cream, multipurpose cream, etc.

Are most commonly used herbal cosmetic products for topical application. Cold Creams prepared are usually w/o type of emulsion instead of o/w type of emulsion as seen in vanishing creams and gives a cooling effect upon application.

**Advantages**

- 1) It should be perfect for the winter season because they restore the hydration of skin.
- 2) Convenient and easy to apply.
- 3) Immediate & local action is got.
- 4) It can also be used in makeup remover.
- 5) less greasy as compared to ointment.
- 6) Maintain the skin moisture balance and avoid rough skin condition.
- 7) To provide an oily protective layer on the skin.
- 8) To remove oil-soluble impurities from the skin.
- 9) To provide emollient effect.
- 10) Helps to maintain the skin moisture balance. & avoid rough skin condition.

Disadvantages

- 1) Stability is not as good as ointment.
- 2) Risk of contamination is high than others dosage form because they are less.
- 3) It will feel very greasy on the application.
- 4) Shorter shelf-life because of the presence of flavouring and colouring agent.
- 5) Cold cream is more of a winter product and feels more uncomfortable in the summer season.

Ideal properties/Characteristics

- 1) Cold cream should have optimum PH is 4.6-6.
- 2) It should have optimum consistency.
- 3) It should not produce sticky feeling on application.
- 4) It should be attractive in appearance
- 5) It must be non-irritant & non-inflamm-atory.

- 6) It should give cooling effect
- 7) Easily penetration through skin.
- 8) It should have low sensitization index.
- 9) It should be miscible with skin secretion.
- 10) Restore the moisture to dry skin.



Formula for preparation of herbal cold cream

Sr. no.	Ingredients	Quantity (20 gm)	Role of ingredient
1	White bees wax	3 gm	Emulsifying / stabilizing agent
2	Jogoba oil	0.3 ml	Anti inflammatory /healing agent
3	Turmeric extract/powder	1.8 gm	Glowing skin agent
4	Neem oil	9.2 gm	Healthy skin agent
5	Coconut oil	0.3 ml	Moisturizer agent
6	Powder borax	0.1 gm	Stabilizing agent
7	Rose water	5.2 ml	Vehicle



Formulation of herbal cold cream

- 1) Accurately weigh all ingredients.
- 2) Melt white bees wax, in evaporating dish at 75°C and add turmeric extract / powder and

then in the small-small amount add Jojoba oil, neem oil and coconut oil in it stir well to get oily phase.

- 3) Dissolve the borax powdered in rose water with the help of heat to get aqueous phase.
- 4) Then oily phase is add into aqueous phase gradually with the constant stirring in evaporating dish
- 5) Continuous this process for 5 min. in evaporating dish.
- 6) Then remove from the heat and stir until gets cold.
- 7) As compared to other creams this cream may be heavier by adding more wax.
- 8) Then transfer in a suitable container and label it then submit

Storage

- 1) Stored in a well closed container at a temperature not exceed 25°C.
- 2) Store in cool place.

Evaluation of cold cream

1) Physical properties

The cream was observed for the color, odour and appearance.

2) Washability

The cream was applied on the hand & observed under the running.

3) PH

The pH was calibrated with the help of standard buffer solution. Weigh 0.5 gm of cream dissolved it in 50 ml of distilled water and its pH was measured with the help of digital pH meter.

4) Viscosity

Viscosity of the cream was determined with the help of Brookfield viscometer at 100 rpm with the spindle number.



5) Spread ability test

The cream was applied between the two glass slides & was compressed between the two-glass slides to uniform thickness by placing 100 gm of weight for 5 min 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.

6) Irritancy test

Mark an area on the left or the right hand dorsal surface. Cream was applied to the specified area & time was noted. irritancy, edema, etc was checked if any for regular intervals up to 24 hours and reported.



Labelling contents

- 1) Product name (In capital)
- 2) On right side
 - a) Each contain

(Ingredients name, quantity in gm, mg, % etc.)

b) Category

c) Storage

d) Direction

(Only write red colour pen).

3) On left side

a) Batch No

b) Lic No

c) Mfg date

d) Exp. date

e) MRP

4) In bottom side

Manufactured by

Labelling

Polyherbal cold cream. (20 gm)		
Each contain:		Batch No : Vb/234LIC No : 6634 MFG Date :01/Sep/2023Exp. Date : 30/Aug/2024MRP : (including of all taxes)
White bees wax	03gm	
Jojoba oil	0.3ml	
Turmeric extract/powder	1.8gm	
Neem oil	9.2gm	
Coconut oil	0.3ml	
Powder borax	0.1gm	
Rose water	5.2ml	
Category :- Cold cream		
Storage:- It should be stored in well closed container		
Direction:- For external use only		
Manufactured by :- LSDP College of Pharmacy Mandavgan Pharata 412011		

Uses of cold cream

- 1) To provide emollient effect
- 2) To provide oily protective layer on the skin.
- 3) To remove oil soluble impurities from the skin
- 4) It helps in maintenance of moisture balance of skin and avoid rough skin condition.
- 5) Medicated cold cream is mainly used as topical pharmaceutical dosage form for the treatment of skin.

DISCUSSIONS

The organoleptic properties of formulated herbal cold cream were evaluated and the results were apt. Other physical parameters like pH, homogeneity, type of smear, emolliency, viscosity and type of emulsion were also evaluated accordingly and pH was found to be compatible with the pH of skin secretions and showed proper pH range that is approximately pH 6, prepared formulation showed good spread ability and emolliency.

The thermal stability studies were also conducted for a month, there was no sign of separation of aqueous and oily phases.

The formulated cream was studied for microbial contamination, no sign of microbial growth was visible after the specified incubation period of 24hrs and further more a patch test was done which shows, it is safe to use the prepared herbal turmeric cold cream as it did not show any signs of irritancy, redness.

Marketed product

- Himalaya cold cream [Himalaya]
- Herbal cold cream [Ayur]
- Cold cream [Apollo]
- Polyherbal cold cream [Panchvati].

CONCLUSION

From the above results it is concluded that the formulated cream showed good consistency and spread ability. Homogeneity, pH, non-greasy and there is no phase separation during study period of research. From the above study it can be concluded that the herbal cold cream is safe to use as it is developed from herbal extract. Natural remedies are more acceptable in the belief that they are safer with fewer side effects than the synthetic ones.

So, the values of herbs in the cosmeceutical has been extensively improved in personal care system and there is a great demand for the herbal cosmetics nowadays. A herbal cream which is non-toxic, safe, effective and improves patient compliance by the utilization of herbal extracts would be highly acceptable than synthetic ones.

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