

# Poly Herbal Cold Cream

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**Abstract** Herbal cosmetics are the preparations are used to beautify and enhance the human appearances. The aim of the presenter search was to formulate and evaluate the herbal cold containing plant extracts prepared by using water in oil method for the purpose of nourishing and moistening the skin. The cold cream is prepared by using the neem oil and extract of turmeric. Quality evaluation of the formulated product was assessed by using different evaluation methods. No change of the physical properties was observed in formulated cream. The formulated cream showed good consistency and spreadability, homogeneity, pH, non-greasy, no evidence of phase separation during study period of research. Stability parameters like visual appearance, nature, viscosity and fragrance of the formulated cream showed that there was no significant variation during the study period of research. The herbal extract containing cold cream gives the cooling and soothing effect due to slow evaporation of water present in the emulsion. The cold creams are more moisturizing as they provide an oily barrier which reduces the water loss from the stratum corneum, the outermost layer of the skin. They are water-in-oil emulsion and intended for application on skin or accessible mucous membrane to provide localized and sometimes systemic effect at the site of application.



## INTRODUCTION

Cosmetics are the products which are generally used to beautify the skin and also to purify the skin. The cosmetics are the word derived from Greek word - 'kosmeticos' which means to adorn. From that time the materials which are used to promoting appearances or to beautify the skin are called as cosmetics. From ancient time till now people are still using polyherbal or herbal cosmetics for the beautification of skin. Cold cream is the water in oil emulsion. Cold cream gives the prolonged contact time in the site of application as

compared to the other semisolid dosage form or formulation. They give elegance to the skin and it is not that much greasy. Due to the oil phase, it gives an emollience to the skin. The function of the cold cream is for restoring moisture to dry skin, it allows to eliminate the waste materials from the pores and also cools the body.

## MATERIAL AND METHOD

1)Bess wax: Bees wax is one of the most important ingredients in home- made cosmetics. Why on earth I haven't yet written a word about beeswax? Maybe beeswax is just so self-evident that I haven't even thought about it. However, beeswax is the most versatile ingredient that suits perfectly to the skin. The beeswax itself is clear and transparent. Worker bees chew the beeswax which brings propolis to wax. The pollen carried by the worker bees gives to beeswax its clear, yellow colour.



2)Borax :-Borax is used in lotions and creams. Borax is combined with wax to improve the consistency of lotions and creams. It also work as an emulsifier when used with wax and it is mostly used in hand soaps. It is excellent ingredient used for cleaning as it's alkaline in nature.



3)



4) Rose water:-Rose water is created by distilling rose petals with steam. Rose water is fragrant, and it's sometimes used as a mild natural fragrance as an alternative to chemical-filled perfumes. Rose water has been used for thousands of years, including in the Middle Ages. It's thought to have originated in what is now Iran. It's been used traditionally in both beauty products and food and drink products. It also comes with plenty of potential health benefits, including the following.

Khadi herbal pure neem (*Azadirachta indica*) oil procured from the local market and turmeric (*Curcuma longa*) powder also procured from the local market.

Chemicals used are of analytical agent (AR) grade (LOBA chemicals Ltd).

Extraction of Curcumin: Accurately weighed quantity of turmeric was taken. Then extract it with n- hexane for 2 hrs. discard the n-hexane extract with the extract marc with acetone for 2 hrs. Distil off the acetone and dry the crystals. Then recrystallize the curcumin with the help of ethanol.

•Preparation Of Polyherbal Cold Cream:

Formulation can be prepared by adding twodifferent phases which are As follows.

Phase1: Melt the solid ingredients by indirect the at then add all the oils initand stir well.

Phase 2: Dissolve the borax in water with the help of heat. While still hot add the phase 1 into the phase 2 gradually with constant stirring to the wax and oil mixture. Continue this process for 5 minutes, stir all the time then remove from the heat and stir until it gets cold. As compared to other creams this cream may be made heavier by adding more wax.

Formula no.1

Ingredients	Quantity
Beeswas	3gm
Jojaba Oil	0.3 ml
Termeric extract	1.8 gm
Neem oil	9.2gm
Coconut Oil	0.3 ml
Powdered Borax	0.1 gm
Rose Water	5.2 ml

Formula no. 2

Sr. No.	Ingredients	Quantity
1	Beeswax	3gm
2	Almond oil	0.3ml
3	Termeric extract	1.8gm
4	Olive oil	9.2 ml
5	Coconut oil	0.3 ml
6	Powdered borax	0.1gm
7	Rose water	5.2mk

Formula no. 3

Sr.no.	Ingredients	Quantity
1	Beeswax	3gm
2	Almond oil	0.3ml
3	Turmeric extract	1.8 gm
4	Levender oil	9.2ml
5	Coconut oil	0.3 ml
6	Borax powder	0.1gm
7	Rose water	5.2 ml

Table No.1: Formulation Table For Herbal Cold Cream (For 20 Gm):

Evaluation of Cream: Physical properties: The cream was observed for the color, odor and appearance.

pH: The pH meter was calibrated with the help of

standard buffer solution. Weigh 0.5 gm of cream dissolved it in 50.0ml of distilled water and its pH was measured with the help of digital pH meter.



Viscosity determination: Viscosity of the formulation was determined by Brookfield Viscometer at 100 rpm, using spindle no 7.

The viscosity of formulated cream bases was determined. The viscosity determinations were carried out on Brook-field viscometer using spindle number S-07 and the determinations were carried out in triplicate and the average of three reading is recorded.

Brookfield viscometer.

PH

The pH of aloe cold cream was determined using pH meter. The most accurate common means of measuring pH is through a lab device called a probe and meter, or simply a pH meter. The probe consists of a glass electrode through which a small voltage is passed. The meter is a voltmeter, measures the electronic impedance in the glass electrode and displays pH units instead of volts. Measurement is made by submerging the probe in the semisolid until a reading is registered by the meter.



Spreadability test:



The cream sample was applied between the two glass slide sand was compressed between the two-glass slide to uniform thickness by placing 100gm 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 spreadability.



Spread ability =  $m \cdot l / t$

$m$  = weight tight to upper slide - length moved on the glass slide  
 $t$  = time take

• Irritancy test: Mark an area (1sq.cm) on the left-hand 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 24hrs. and report. Test for microbial growth: Agar media was prepared then the formulated cream was inoculated on the plate's agar media by steak plate method and a controlled is prepared by omitting the cream. The plates were placed in the incubator and are incubated in 37 C for 24 hours. After the incubation period, the plates were taken out and the microbial growth were checked and compared with the control. Saponification value: Take 2 gm of the substance and reflux it with the 25 ml of 0.5 N alcoholic KOH for 30 minutes. Then add 0.1 ml of phenolphthalein as a indicator and titrate it with the 0.5 N HCL. Saponification value= $(b-a)*28.05/W$  a=volume of titrate b=volume of titrate w=weight of substances in gram

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•Acid value:  
Take 2 gm of the cream dissolved in accurately weighed in 10 ml mixture of the equal volume of alcohol and solvent ether. Then attached the flask with the condenser and reflux it with the slow heating until the sample gets completely dissolve then add 1 ml of phenolphthalein and titrate it with 0.1 N NaOH until it gets faint pink color appears after shaking in 20 seconds.  
Acid value= $n*5.61/w$   
w=weight of the substances  
n =the number of ml in NaOH required.  
Dye test: The scarletred dye is mixed with the cream Place a drop of the cream on a microscopic slide then

covers it with a coverslip, and examines it under a microscope. If the disperse globules appeared the ground colorless. The cream is o/w type. The reverse condition occurs in w/o type cream i.e. the disperse globules appear colorless.

### POLYHERBAL COLD CREAM

- \* Storage:  
Wide mouth glass/plastic containers.  
Aluminum or plastic tubes.
- \* Uses:  
Typically used to cleanse the face of makeup. Heavily moisturizes Dry skin. Can also be used as balm for any cracked lips.



### RESULT

Formulation	F1	F2	F3
pH	6.8	5.7	7.1
Color	Pale green	Pale green	Pal Green
Homogeneity	Good	Uniform	Good
Texture	Smooth	Smooth	Smooth
Spreadability	Good	Properly	Good
Saponification value	22.3	21.7	23.1
Acid value	5.7	5.6	5.0
Dye test	O/w	O/w	O/w
Irritancy test	No	No	No
Washability	Easily washable	Good	Good
Viscosity	489990	396277	450380

### 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 polyherbal cold cream is safe to use as it is developed from herbal product.

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