

A STUDY ON PREPARATION AND EVALUATION OF HERBAL PEEL OFF FACE MASK

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ABSTRACT

Skin care preparations are designed to exert local activity when applied over the skin mucous membrane, these skin preparations include gel, lotion, ointment, cream, peel off mask etc. Peel off mask is the type of dosage form which is gently applied onto the facial skin surface and is peeled off after a few minutes of its application. It is used as the remedy to treat facial skin related problems and tightening of skin, moisturizing and tan removal from the skin. Here we are using 4 formulations of Cucumber neem peel off face mask. Cucumber extract helps in moisturizing & enlarged pores. Neem oil helps in skin pigmentation, reduce acne, reduce wrinkles etc. Excipients used in the formulation are PVA (polyvinyl alcohol), glycerin, gelatin citric acid. Different formulations were taken and evaluated for the various parameters like spread ability, pH, stability studies, peeling time etc. The formulation evaluated for the parameters stands in standard range.

KEYWORDS: Face Mask, Epidermis, Dermis, Hypodermis, Acne, Soothing, Herbal Extract, Spreadibility.

INTRODUCTION

Herbal cosmetics are defined as the beauty products which pass desirable physiological activity such as healing, soothing, appearance, enhancing skin glow and conditioning properties because of herbal ingredients. These herbal cosmetics that can repair revitalize and protect skin. One of the most common disorders found among youngsters usually 18-25 years of age is Acne. Acne is a popular disorder among the teenagers which make them feel unappealing to look at and a sort of inferior feel. Herbal Plants are well known for their medicinal and cosmetic uses.^[1]

Skin is a very sensitive and protective layer of the human body, which is exposed to environmental pollution hence, it is very essential to protect the skin. Therefore, it is necessary to take care of facial skin to overcome the problem associated with it, one of which is taking care of facial skin by using face masks. Peel-off mask is applied as a liquid film that thinly spreads with fingers on the face and peels-off as a thin plasticized film after complete drying without leaving any residues. It can repair, refresh, and tighten facial skin, provides deep pore cleansing and skin debris removal. Peel-off can also provide slight moisturizing action and enhances the occlusive effect, improving blood circulation, stimulating the activity of skin cells, removing dead skin cells, softening the skin, and providing nutrients on the skin mostly. The objective of this study was to develop and formulate Bael fruit peel-off mask and evaluate it by

several test methods, so it can be used as an alternative to facial skin care products.^[2]

Ayurveda suggests face packs to help ladies get rid of wrinkles, dark circles, zits, and acne. Herbal face masks improve the smoothness and radiance of the skin. By using herbal face packs according to our skin type, we can get the most out of them. The finest Ayurvedic method for increasing fairness is using ayurvedic face packs, which make the skin glow. Face packs are useful for treating, promoting, and preventing skin issues. A face pack is a plane powder that is appeal to the face. A good herbal face pack should give the skin the nutrients it needs and should reach the subcutaneous tissues to deliver its active ingredients the necessary vitamins. Different skin types require various herbal face packs. Ayurvedic face packs are used to lessen wrinkles, zits, acne, and dark circles.^[3]

TYPES OF PEEL OFF FACE MASK^[4]

Masks, as we know them today, come as one of 4 main types

- 1. Peel off:** Applied to the skin, allowed to dry for 30 minutes then peeled off as one continuous sheet. They are ideal to provide a purifying and renewing perception as well as action. They effectively remove the very outer layer of old, dead skin cells when the polymeric network is removed, to reveal fresher skin beneath.

2. **Sheet:** Sheet masks are the most versatile because they are effective serum formulations with actives added to achieve the product purpose, e.g.:
- Anti-sebum.
 - Whitening.
 - Anti-aging.

Whatever you desire based on the active chosen! The sheet of the mask helps stabilize the formulation and give it the required structure, so little in the way of stabilizing and structuring ingredients are needed.

3. **Charcoal/clay:** These types of masks are essential cream cleansers with the charcoal or clay added. This also helps build the viscosity. While charcoal and clay materials should be purchased suitably treated, they can act as fantastic food sources for micro-organisms. So, good preservation for this product is essential.
4. **Leave-on:** These types of masks are ultra-hydrating crème-gel or cream forms, applied to the skin and left on for 15-30 minutes (or overnight) with the remainder rubbed in after that time. They contain more lipid and humectant content than standard day creams as they are intended to provide more moisture and emollience than standard creams.

AIM AND OBJECTIVE

➤ Aim

To prepare and evaluate herbal peel of face mask.

Formulation

Ingredients	Principle	F1	F2	F3	F4
1. PVA.	Film forming agent	14%	12%	10%	8%
2. GELATIN	Thickening agent	4%	6%	8%	10%
3. CITRIC ACID.	Preservatives	0.1%	0.1%	0.1%	0.1%
4. WATER.	Solvent	q. s	q. s	q. s	q. s
5. CUCUMBER EXTRACT.	Active ingredient	1ml	1ml	1ml	1ml
6. NEEM OIL	Active ingredient	1ml	1ml	1ml	1ml
7. GLYCERIN.	Moisturizer	2ml	2ml	2ml	2ml
8. ROSE WATER	Perfume	2drpos	2drpos	2drpos	2drpos

Procedure

- All ingredients were prepared and weighed.
- PVA was developed with distilled water at 80 °C and Gelatin was developed with distilled water.
- PVA was added to Gelatin and stirred.
- Citric acid which has been dissolved with hot distilled water into the mixture.
- Then all the ingredients are stirred and mixed with glycerin, herbal extract in a beaker glass under stirring.
- Furthermore, distilled water was added until 100% w/w total volume.

Evaluation

5.9

- **Organoleptic properties:** We have done the visual inspection of product and observed that it was: -
Colour: -whitish grey

➤ OBJECTIVE

- Preparation of herbal peel of face mask.
- Identification, collection of herbal plants.
- Extraction of herbal components without adding any chemical preservatives.
- Standardization of herbal peel of face mask.
- Preparation of convenient economical and herbal peel off face mask.
- The formulated peel off face mask will be subjected to accelerate stability study as per ICH guidelines.

METHODOLOGY

PLANT MATERIALS: All the ingredient used in the preparation i.e., cucumber extract, neem oil. We extract them by following process

Extraction of Cucumber

- 37 gm of thin slice of cucumber are taken in a glass jar.
- Add 70 gm of glycerin and stirred it well.
- Keep it aside for 10 days.
- Filter out the solid residue by using cheese cloth.

Extraction of Neem Oil

- 20gm of dried neem leaves are taken and crushed in a mixer grinder.
- Powder is taken and 100 ml of olive oil are added.
- Boil the mixture in a water bath for 30 min.
- Filter out solid residue by using cheese cloth.

Odour: -scanted

State: - semi solid

Consistency: - smooth and thick

- **pH:** The pH value of this purely herbal peel off mask was determined by using digital pH meter and pH value of this activated charcoal peel off mask was found to be 6.5.^[5]
- **Irritancy test:** The irritation test was done by applying a formulation on hand's back skin and leave it for 15 minutes to check irritation reaction such as swelling, itching and redness effect on the skin.^[1]
- **Spreadibility test:** Placed 1 gm formulation on a butter paper and on the formulation put watch glass. After that 5gm weight was placed on watch glass for 2 minute to compress the sample to uniform thickness and its diameter was measured.^[5]

- **Peel off test:** The formulation film of 4x4mm was spread on backside of the hands skin. Leave it for 15-20 minutes to dry properly. After 15-20 minutes, peel off the dry film from the skin surface. Easy removal of peel without any complications was observed.^[5]
- **Folding endurance:** The formulation film was applied onto the skin. After drying, a portion of film (3x3cm) was cut and folded it at the same place until it was broken. Folding endurance can be defined as the value of number of times the film can be folded without breaking.^[5]
- **After feeling:** after the utilization of fixed measure of peel off face mask emollience, thickness, and measure of build-up left was checked.^[5]
- **Removal test:** The peel off face mask was applied on the skin was handily taken out by peeling.
- **Homogeneity:** After the gels have been set in container, all developed gels were tested for homogeneity by visual inspection. They were tested for their appearance and presence of any aggregates.^[6]

TEST RESULT

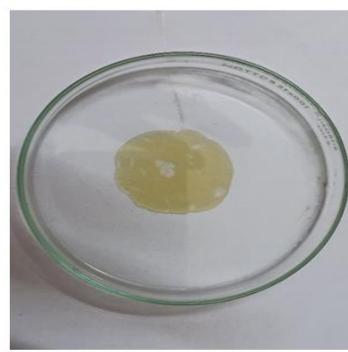
Test	pH	Irritancy test	spreadibility	Peel off test	After feeling	Removal test	Folding endurance	colour	odour	consistency
result	6.5	P	G	P	COOL	P	20	Whitish grey	scanted	Smooth & thick



pH TESTS: -6.5



PEEL OFF TESTS



SPREADIBILITY TESTS

CONCLUSION

Presently, people need cure form various types of skin related problems without getting any side effects. Herbal ingredients provide an opportunity to produce cosmetics which are less harmful, safe when compared to synthetic formulations. The present study of peel off mask contains natural ingredients like charcoal, turmeric, aloe vera and neem.

The present study I found that the formulation was much stable in room temperature and showing good spreadibility which make people comfortable during application. This peel off mask good compatibility with all type of skin and showing no irritation or allergies. this peel off mask showed a good peel off property on human skin without any irritation and itching and without leaving any residue. The study of herbal peel off mask confirmed that it can remove dead cells and extra hair of the face skin, pigmentation and provide glow to the skin and clean the skin pores. And it also moisturizes and hydrate the skin.

The preparation was found to be stable, and it is compatible with all type of skin, it showed good spreadability, the preparation helps in removing dirt from the skin surface and protect skin from outer environment.

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