

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 designed to address common skin concerns and tightening of skin, moisturizing and tan removal from the skin. Here we are formulating of Turmeric peel off face mask. Turmeric extract adds glow to the skin, treats acne, slows down skin ageing. Aloe vera gel helps to remove acne and moisturizing the skin and have soothing property. Excipients used in the formulation are PVA (polyvinyl alcohol), glycerin, gelatin citric acid. Different formulations were taken and evaluated for the various parameters like spreadability, 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, SPREADABILITY.

INTRODUCTION:

The term "herbal cosmetics" refers to beauty products that contain herbal elements and therefore exhibit desired physiological activity, such as healing, calming, appearance, boosting skin radiance, and conditioning qualities. These herbal cosmetics help rejuvenate, protect, and restore skin. Acne is one of the conditions that affect children the most, mainly those between the ages of 18 and 25. Teenagers who suffer from acne frequently feel self-conscious about their appearance and inferior. Herbal plants have a long history of being used in medicine and cosmetics.^[1]

It is crucial to protect the skin since it is a highly delicate and protective covering of the body and is exposed to environmental contamination. In order to combat the issues linked with it, facial skin needs to be taken care of, and one way to do this is by utilizing face masks. A peel-off mask is applied to the face as a thin liquid film that is spread evenly using the fingers. After fully drying, the liquid film peels off the face as a thin plasticized film with no residue. It may deep clean pores, remove skin dirt, and tighten, rejuvenate, and heal facial skin. Peel-off can also slightly moisturize while enhancing the occlusive effect, which increases blood flow, activates skin cells, and removes.^[2]

To help women get rid of wrinkles, dark circles, zits, and acne, Ayurveda offers face packs. The smoothness and brightness of the skin are enhanced by using herbal face masks. We can maximize the benefits of herbal face packs by utilizing them in accordance with the type of skin we have. Using

ayurveda face treatments, which make the skin glow, is the best ayurveda way for enhancing fairness. Face packs can be used to treat, encourage, and prevent skin problems. An appealing powder for the face is called a face pack. A good herbal face pack should transport the vitamins and nutrients that the skin need to the subcutaneous tissues as well as provide the skin with the nutrition that it needs. Different herbal face packs are needed for different skin types. The use of Ayurvedic face packs.^[3]

TYPES OF PEEL OFF FACE MASK:^[4]

Masks, as we know them today, come as one of 4 categories:

1. **Peel off:** One continuous sheet was applied to the skin, left to dry for 30 minutes, and then peeled off. They are perfect for offering both a purifying and rejuvenating action and perception. When the polymeric network is removed, they efficiently remove the very top layer of old, dead skin cells to reveal younger-looking 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.:
 - [Whitening](#)
 - [Anti-aging](#)
 - Anti-sebum

The sheet of the mask helps stabilize the formulation and give it the necessary structure, so little in the way of stabilizing and structuring ingredients are needed to achieve anything you wish based on the active selected.

3. **Leave-on:** These kinds of masks come in crème-gel or cream forms that are extremely moisturizing. They are applied to the skin, kept on for 15 to 30 minutes (or overnight), and then the remaining product is rubbed in. They are meant to deliver more moisture and emollience than regular creams, hence they have greater lipid and humectant content.
4. **Charcoal/clay:** With the addition of charcoal or clay, these types of masks serve as necessary cream cleansers. Additionally, this increases viscosity. Clay and charcoal are excellent food sources for microorganisms, but they should be purchased properly prepared. So proper preservation is crucial for this product.

AIM & OBJECTIVE

➤ Aim:

To prepare and evaluate herbal peel of face mask.

➤ 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.

MATERIAL AND METHODOLOGY:

PLANT MATERIALS: All the ingredient used in the preparation i.e. Aloe vera gel, turmeric extract. We extract them by following process: -

EXTRACTION OF TURMERIC:

- Take some raw turmeric, peel of the skin, and shred it using a stainless steel grater.
- 20 grams of grated turmeric are added to a glass jar along with 30 milliliters of water and 70 milliliters of glycerin.
- Put the cover on tightly and set it aside for two weeks.
- Apply cheese cloth to the filter to remove the solid waste.

EXTRACTION OF ALOE VERA JELLY:

- 2 medium slice of raw aloe vera leaves are taken.
- Scoop out the jelly.
- Gelly is transferred into the mixer grinder.
- Filter out the juice to avoid large particle.

CHEMICAL MATERIALS: -all the inorganic and organic material used in the preparation is PVA (polyvinyl alcohol), gelatine, glycerine, citric acid, and we collect all of them form college laboratory.

FORMULATION:

Ingredients	Principle	F1	F2	F3	F4
1. PVA.	Film forming agent	14%	14%	12%	10%
2. GELATIN	Thickening agent	4%	8%	10%	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. TURMERIC EXTRACT	Active ingredient	1ml	1ml	1ml	1ml
6. ALOE VERA	Active ingredient	1gm	1gm	1gm	1gm
7. GLYCERIN.	Moisturizer	2ml	-	2ml	-
8. ROSE WATER	Perfume	2drops	2drops	2drops	2drops

PROCEDURE

- All ingredients were prepared and weighed.
- At 80 °C, distilled water was used to create PVA, and the same water was used to create gelatin.
- Gelatin was mixed with PVA before being added.
- Add hot distilled water and dissolved citric acid to the mixture.

- Then, in a beaker glass while swirling, all of the ingredients are combined with glycerin and herbal extract.
- Additionally, distilled water was added until the volume was 100% w/w of total volume.

EVALUATION TESTS:

1.ORGANOLEPTIC PROPERTIES: We have done the visual inspection of product and observed that it was:-

Colour: -pale yellow

Odour: -Scanted

State: - semi solid

Consistency: - smooth and thick

2. pH: The pH value of this herbal peel off mask was determined by using pH paper and pH value of this cucumber and turmeric peel off mask was found to be 6.5.^[5]

3. 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]

4.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.^[6]

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]

6. 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]

7.AFTER FEELING: After the utilization of fixed measure of peel off face mask emollience, thickness, and measure of build-up left was checked.^[5]

8.REMOVAL TEST: The peel off face mask was applied on the skin was handily taken out by peeling.

TESTRESULTS

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	Pale yellow	Sweet	Smooth& thick

G: -good

B: bad

P: pass

F: -fail



Fig: Peel off Test



Fig: Spreadability Test



Fig: pH Test - 6.5

CONCLUSION:

Nowadays, people are looking for solutions to various skin-related issues without any side effects. In order to eliminate herbal plant ingredients and their derivatives, there is a chance to create cosmetics that are safer and less harmful than synthetic formulations. The study on peel-off masks includes natural ingredients such as turmeric, aloe vera, etc.

This study found that the formulation is highly stable at room temperature and shows good spreadability, which makes people comfortable while applying the peel-off mask. The peel-off mask has good compatibility with all skin types and shows no irritation or allergies. The peel-off masks showed good peel-off properties on human skin, with no irritation or itching and no residue. The herbal peel-off mask study confirmed that it removes dead cells, extra hair on the face, pigmentation, provides a glow to the skin, cleans the skin pores, moisturizes, and hydrates the skin.

The stable nature of the product and its compatibility with all skin types Good spreadability Cleanse the skin surface. Protect the skin from environmental factors.

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