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FORMULATION AND EVALUATION OF ALOEVERA AND VITAMIN E PEEL OF MASK

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ABSTRACT

Peel off mask is the type of dosage form which is gently applied onto the facial skin surface and is peeled off after few minutes of its application. It is used as the remedy to treat facial skin related problems such as wrinkles, ageing, acne and mainly used to open the closed pores due to deposition of dust. Aloe vera and Vitamin E is being added as an active ingredient in this formulation. Dosage formulations of peel of mask made in type of three methods. Further preparation peel of mask evaluated physical properties (organoleptic, homogeneity, P^H, spreadability test, peeling time, irritation test). The results showed that the first method shows most of the evaluation parameters compatible during 2 weeks of storage.

Keyword: Aloe vera, Cosmetic, Peel of mask, Antioxidant

INTRODUCTION

Peel of face mask makes skin healthy. People make many attempts to get beautiful and fresher skin. But due to dust, pollution, unhealthy eating habits and poor daily routine, many skin related problems erupt. People use beauty products and home remedies to avoid these problems. In this regard, a peel-off mask can also be a better option as it removes the skin dirt from the inside and also destroys dead skin cell. The

peel-off mask also reduces many skin problems and keeps the skin healthy and fresh [1].

Applying a face mask and using cosmetics to maintain beauty has been a beauty ritual practiced since ancient times. In fact, we know that the first cosmetic product ever made was a face mask. Face masks can nourish, cleanse, moisturize and tone the

skin while also providing essential active ingredients for skin care [2].

Indian women prepare different kinds of face masks at home. You can find many ready-made Ubtan powders on the market where you simply need to mix them with water or milk and apply them to your face.

Ayurveda beauty care has not changed much since its introduction some five thousand years ago, proof of its effectiveness, safety and ease of use.

Roman women regularly used face masks as part of their beauty routine. Oils, honey, vinegar, basil juice and goose fat were popular ingredients. They also used some rather exotic ingredients such as placentas or stools of animals like kingfishers and cows [3].

The pale look continued to be popular well into the times of Elizabeth I. By now, women had resorted to even more dangerous means to reach their desired skin color. They used hitherto unknown toxins such as white lead mixed with honey and olive oil to whiten their skin. But even this was not enough for some, and the practice of bloodletting continued. Fortunately, less invasive methods weren't completely discarded. Face masks made of egg whites and lemon juice were also used by some to brighten and nourish the complexion and achieved much safer results. Face masks in

particular are available in all different types: creams, gels, powders or sheets.

There are masks that choose to follow a more scientific and "chemical" approach and others that are rooted in a natural and holistic approach to skin care [4].

MATERIALS AND METHODS

Carbopol 934 grade dissolved in water for 24 hr and after swell the carbopol is continuous stir with mechanical stirrer. Polyvinyl alcohol dissolved in warm water in water bath gently with continuous mechanical stirring and allows swelling for 2-3 hours then add methyl paraben. To this Disodium edetate (Solubilised in 1M NaOH) were loaded gently & dissolved. Drug solution along with carbopol and PVP were added slowly in swelled NaCMC (Sodium-carboxymethylcellulose) under continuous stirring. Citric acid added to the obtained solution to maintain PH and added in propylene glycol. Talcum powder mixed it to give the formulation opacity. Aloe extract dissolved in Rose water and added the vitamin E in continuous stirring. Final volume was made up with the purified water. After addition of whole ingredient, stirred continuously until a smooth dispersion obtained. Prepared formulation filled in collapsible tube for further analysis [5, 6].

Table 1: Ingredients for the Peel of Mask

Sr. No.	Ingredients	Manufactures
1.	Disodium edentate	S.D. FINE MUMBAI
2.	Polyvinyl Alcohol [PVP]	
3.	Carbopol [934grade]	
4.	Sodium carboxymethylcellulose	
5.	Methyl paraben	
6.	Propylene glycol	
7.	Talcum powder	
8.	Citric acid	
9.	Aloe extract	
10.	Vitamin E	
11.	Rose water	
12.	Water	



Figure 1: Mechanical stirrer

RESULT

The Aloe vera and vitamin E peel off mask was found to successful with good results. The peel off mask showed a good spreadability. The formulation showed a good peel off property on human skin without causing skin irritation. The formulation showed good stability results and was found to be stable till room temperature.

The entire required ingredient to prepare peel of mask Aloe vera powder and vitamin E from the aloe Vera powder extract and vitamin E capsule. It was prepared according to the procedure and evaluated

by performing the above test like spreadability, stability, appearance etc.

EVALUATION [7-10]

1. ORGANOLEPTIC CHARACTER

The consistency and the colour was checked visually the odour was evaluated manually by smelling the product. The organoleptic character include its color, odor, feel and consistency which were evaluated manually for its physical properties (Table 2).

2. PHYSICAL STABILITY

Observation of physical stability at room temperature by observing organoleptic during storage. This formulation was

performed to see the stability on formulations at low and high temperature of prepared peel off mask. Six cycle between refrigerator temperature (4°C) and accelerated temperature (40°C) with storage at each temperature for not less than 24 hours performed. The formulation was found to be stable at these temperatures were subjected to Freeze thaw stress test found stable (Table 3).

3. IRRITATION TEST

This parameter checked with patch test. Irritated skin at the patch site may indicate an allergy

Mark an area (1sq.cm) on the left-hand dorsal surface. Definite quantities of prepared peel of mask were applied to the specified area and time was noted. Irritancy was checked if any for regular intervals up to 24 hrs and reported (Table 4).

4. PEELING TIME

The peel gel was applied on the skin surface uniformly. The peel was allowed to dry. After 15 min the peel was removed from the skin surface. It was observed that the peel was removed easily without breaking (Table 5).

5. HOMOGENISITY TEST-

Test Homogeneity testing is investigated by applying a peel-off mask to a glass object

or transparent material, then observing the composition of coarse or inhomogeneous particles and recording them. The preparation must show a homogeneous order and should not show any coarse grains (Table 6).

6. SPREDABILITY TEST -

The spreading capacity of peel of mask formulation was measured 48 hr after preparation by measuring the spreading diameter of 1 gm of the gel between two 20×20cm glass plate after 1 min. The mass of the upper plate was standardized at 125g (Table 7).

The following equation was used for the purpose:

$$S = m \cdot l / t$$

Where,

S = the spreadability of the mask formulation

m = the weight (g) tied on the upper plate

l = the length of the glass plates

t = the time taken (second)

7. P^H MEASUREMENT

The p^H value of topical peel off mask was determined by using digital p^H meter. One gram of gel was dissolved in 100 ml distilled water and stored for two hours. The measurements of p^H of the formulation were done in triplicate and average values were calculated (Table 8).

Table 2: Organoleptic Properties of the Peel of Mask

PARAMETER	OBESERVATION
Colour	Yellowish Green
Odour	Pleasant
Consistency	Smooth
Nature	Semisolid

Table 3: Stability Study of the Peel of Mask

Stability	Preparation		
	1 gm	2gm	2.5gm
1day	Stable	Stable	Stable
1week	Stable	Stable	Stable
2week	Stable	Stable	Stable

Table 4: Results of Irritation Tests

Formulation	Observation		
1%	Non irritant	Non irritant	Non irritant
2%	Non irritant	Non irritant	Non irritant
2.5%	Non irritant	Non irritant	Non irritant

Table 5: Results of Peeling Time Study

Formulation	Time
1%	12minute,10 second
2%	14 minute, 37 second
2.5%	15 minute,25 second



Figure 2: Applied peeling property



Figure 3: Dried peeling property

Table 6: Homogeneity of the Formulation

Formulation	Observation		
	1%	Gel	Gel
2%	Gel	Gel	Gel
2.5%	Gel	Gel	Gel

Table 7: Spreadability Study of the Formulation

Formulation	Observation		
	1%	0.900 cm ²	1.8 cm ²
2%	0.92 cm ²	1.5 cm ²	2.2 cm ²
2.5%	0.7 cm ²	1.57 cm ²	2.0 cm ²

Table 8: pH evaluation of the Peel of Mask

Formulation	P ^H Observation		
	1Day	1week	2week
1%	5.3	6.0	6.8
2%	5.5	6.2	7.2
2.5%	5.1	6.5	7.5



Figure 4: Formulation of Peel of mask of aloe vera and vitamin E



Figure 5: Packing and Labeling of Final Product

CONCLUSION

The Aloe vera and vitamin E peel off mask was found to successful with good results. The peel off mask showed a good spreadability. The formulation showed a good peel off property on human skin without causing skin irritation. The formulation showed good stability results and was found to be stable till room temperature.

The entire required ingredient to prepare peel of mask Aloe vera powder and vitamin E from the aloe Vera powder extract and vitamin E capsule. It was prepared according to the procedure and evaluated by performing the above test like spreadability, stability, appearance etc.

Aloe vera and peel of mask was prepared and evaluated by doing various test. evaluation tests were carried out and confirmed the product sensitivity and appearance. Aloe vera and Vitamin E peel of mask successfully passed all tests such as Organoleptic characters, Physical stability, Irritation Test, Peeling Time, Homogenisity Test, Spredability Test and PH Measurement.

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