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## Formulation And Evaluation Of Herbal Face Serum

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**Abstract:** Serum has been used as a cosmetic purpose. It is mainly used for treating skin disorders. Such as reduce the aging of skin, reduces redness, inflammation. Orange oil, aloe vera gel, castor oil, glycerin are highly concentrated cosmetic products. Aloe Vera gel is commonly used to treat different skin diseases, sunburn, minor cuts, insect bites, and used as wound healing, anti-inflammatory, anti-bacterial and anti-fungal effect. And orange oil was also used for the vit c. property. Castor oil has anti-inflammatory properties, which can help reduce swelling and puffiness. Facial serum was tested for its pH, physical appearance, spread ability, viscosity, phase separation, Irritancy, Washability, cyclic temperature test, etc. The results of the stability study show that there was no change in visual acuity or homogeneity.

**Keywords:** Face serum, polyherbal, Anti-inflammatory, Active Substances, VitC.

**INTRODUCTION:** Serum is a cosmetic product. There are two types of serum facial serum and Hair serum. Facial serums are lightly textured skincare formulas with a high concentration of powerful ingredients. Unlike a typical moisturizer or cream, facial serums are thinner in texture with a comfortable lightweight feel. Serums are usually formulated with a water-based formula, although some serums contain oils instead.

Cosmetic is a Greek word which means to \_adorn (addition of something decorative to a person or a thing). Cosmetology is the study and application of beauty treatment. It's an art or science of beautifying and improving the skin, nails and hair and the study of cosmetics and their application.

Medicinal herbal such as orange oil, aloe vera gel and rose water have a cooling effect on the skin. Which can help reduce the aging of skin, swelling and puffiness. Some herbs used in face serum such as orange oil has a vitamin C property. And aloe vera has an anti-inflammatory property that can prevent skin infection and reduce the redness of skin.

**MATERIAL AND METHOD:** Firstly, collect raw formed Aloe-vera direct from aloe vera plant, then cut leaves are rinsed in distilled water. A sterile scalpel was used to slice lengthwise through the leaf's output portion. Then, a clean scalpel was used to cut away the colorless parenchymatous tissue of the aloe vera plant. Then the filaments and impurities are removed using muslin fabric. The preparation then used filtrate or filtration product, which is a transparent aloe vera gel used for experimental purposes.

### OTHER EXCIPIENTS:

1. **Orange oil** –Improve hydrate your skin cells in addition to helping you obtain young skin.
2. **Castor oil**–Which can help reduce swelling and puffiness.
3. **Aloe vera gel** –Cooling effect soothes the skin and reduces inflammation.
4. **Coconut oil** –Which help retain the moisture in the skin and help protect and hydrate your skin.
5. **Rose water** – It is said to be a natural skin toner due to its amazing PH- balancing properties.

### PREPARATION OF HERBAL FACE SERUM:

The emulsion (o/w) was prepared according to the formula given below. The oily component consisting of orange oil, Castor oil, tween 20 and coconut oil is mixed together for 10 minutes to obtain a uniform solution. At the same time the water phase was prepared by mixing aloe Vera gel, glycerine, rose water and a small amount of distilled water uniformly. The oil phase is added to the liquid phase by drop wise under mechanical vibration at 2500 rpm to obtain oil in water based on biphasic emulsion.

### COMPOSITION TABLE:

Ingredients	Standard formula (100ml)	Working formula (30ml)
Orange oil	25%	5gm
Aloe vera gel	25%	5gm
Castor oil	9%	1.8ml
Coconut oil	2%	5ml
Tween 20	1%	0.4ml
Rose Water	0.1%	0.02ml
Distilled water	Q.S to 100ml	Q.S to 30ml

### EVALUATION TEST:

1. **Physical Evaluation Test:** The herbal face serum was observed for the color, odour, texture and consistency.
2. **PH of Serum:** It is evaluated by pH paper. The skin has an acidic range, and the pH of the skin serum should be in the range of 4.1-6.7.
3. **Washability:** Washability test was carried out by applying a small amount of formulation on the hand and then washing it with tap water formulation was easily washable.
4. **Irritancy:** The serum was applied to that area and the time was noted then it is checked for irritancy, erythema, and edema if any for an interval up to 24h and reported. According to the result the formulation showed no sign of Irritancy, erythema, and edema.

5. **Phase separation:** Prepared formulation was kept in a closed container at room temperature of 25-1000C away from light. Then phase separation was checked after 24h. Any change in the phase separation was observed.
6. **Cyclical Temperature Test:** This test is not carried out at any fixed temperature and humidity. In this test, temperature was changed cyclically every day. At room temperature and frizzling temperature to stimulate the change in temperature.

## RESULT:

Sr no.	Test	Observation
A)	<b>Physical Evaluation</b>	
	1.Colour	White Translucent.
	2.Odour	Orange odour.
	3.Texture	Smooth homogenous.
	4.Consistency	Semi-liquid.
B)	<b>PH Value</b>	6.07
C)	<b>Washability</b>	Easily washable.
D)	<b>Irritancy</b>	No irritation.
E)	<b>Phase separation</b>	No change
F)	<b>Cyclic temperature test</b>	
	1.Freezer temperature	Unstable
	2.Room temperature	Stable

## CONCLUSION:

The medicated herbal face serum was prepared by using herbal ingredient and evaluated using different. Parameters such as colour, odour, texture, and consistency.

The medicated herbal face serum shows significant result and aloe-vera shows anti-inflammatory and cooling property and orange oil shows the vitC activity and castor oil has anti-inflammatory properties, which can help reduce swelling and puffiness which make to beneficial for skin for treating skin related disorders effects. This study shows that prepared herbal face serum is safe and use as cosmeceutical.

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