



# CREAM A REVIEW ON PREPARATION METHOD AND EVALUATION OF CREAM EAM - PREPARATION METHOD AND EVALUATION OF CEAM

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## ABSTRACT

Creams are gentle on the skin, as well as environmentally friendly. This makes them ideal materials for topical medicines too. Their effects are not only decorative, as in sanctification and beautifying; aesthetic (as when they change a person's appearance), or moisturizing for the skin. Prevents bacterial and fungal skin infections; repairs cuts, scrapes, abrasions. Human skin is very tender to injury, but self-repairing. But natural rehabilitation can be time-consuming, and there's always the danger of infected in the early stages. Creams are used in other similar cases to speed healing at the site of injury and prevent infection. This literature review centered on the use of pharmacy creams in crack repair, explained how to apply them when cracks occur and what kinds are right for different types. Their brackets reflect their functions, properties and the types of creams they are used in; different ingredients which go into making up various kinds of creams; lists with numerous judgment criteria.

**KEY WORD:** Cream preparation evaluation.

## INTRODUCTION

Topical medications are creams applied to the skin. The oil painting in an oil on canvas is a cream, which means the thickness of this diamond-like substance can be different between it and water. Creams used for decoration-such as sanctification, mortecianing or beautification and perfection of appearance; to protect the dead from evil things and keep them in good condition at all times; healing creams. These topical formulations are for local use to apply drugs to the lower layers of skin or mucous membranes. This products are planned for topical use to deliver drugs more effectively on the skin's surface in diseases of the skin. Creams are made through pharmaceutical processes and therefore constitute medicines. The skin diseases and dermatitis are mainly treated with non-medicated creams, or by treating the cream. The creams all have Ayurvedic, herbal or allopathic properties they allow people to use them by

the needs of their skin conditions. They consist of one or more active pharmaceutical ingredients dissolved in a appropriate base. In terms of stage, creams can be divid into O/W or W/O fusion creams. In general the term "cream" refers to wraparound formulations, which are water-in-oil paints or oil-inwater ones (evaporative creams), among others [3].



**Figure 1: Cream**

## **CREAM CLASSIFICATION**

There are many different categories of skin creams.

1. Uses by function, such as foundation, massage and cleansing.
2. Such as cold cream, disappearing cream and so on.
3. That depends on the type and kind of emulsion.

Types of creams according to function, properties and type of emulsion:

1. Make-up cream (O/W emulsion):

- a) Disappearing cream.
- b) Foundation cream.

2. Cleansing cream, cleansing milk (emulsion), and cleansing lotion.

3. Winter cream (without emulsion)

- (a) Cold cream or moisturizing cream.

4. General creams and all-purpose creams.

5. Skin protection cream.

6. Hand cream and body cream.

7. Night cream and massage cream.

### **1. Make- Up**

These are essentially O/W emulsions. It is a smooth, creamy product that can make the skin matte or glossy. It moisturizes the skin, is also generally sweat resistant and gives it a fresh bloom.

### **2. Evaporating Creams**

Because it seems to disappear when applied, the skincare product is known as an evaporative cream. Stearic acid is the basis of these preparations. After surgery, cream leaves a greasy film on the skin. It also has drying effects. This explains why they are used mainly in warm climates, where sweat appears on their skin.

### **3. Foundation Creams**

These creams serve as bases for makeup. Used as base for applying makeup.

They are softening to the skin and keep out dirt, but not too slippery nor too dry.

Multicolored lipstick applied to the face, making a really fixed color like this one which resembles complexion and conceals flaws on top of changing skin tone.

### **4. Cleansing Creams**

These creams are used as makeup bases. This is a sticky base for operation. These creams serve body-drawing purposes and the special hygiene and beautification required of cosmetics. Cleansing creams and poultices may be used to remove makeup, facial creams or oil paintings from face and neck.

### **5. Winter Cream**

There is more oil than water in these expressions. Creams are applied to cracked and dry skin.

### **6. Cold Cream**

Also called a humectant or emollient. However, cold cream must have an emollient effect. It should be cool when applied and not block the oil painting film on skin.

### **7. All-purpose cream/general cream**

Nowadays, a lot more of these creams are used than in the future. These creams are pleasantly thick and spread easily on the skin. They can also be used as night creams, nourishing creams or even sunburn preventative and skin-moisturizing protectant.

### **8. Night Cream**

Creams are primarily used for skin care and dry skin treatments. In other words, night creams are those that you put on your skin and leave overnight for several hours. Usually used externally, massage creams are a kind of emollient used in rubbing the skin.

## COMMON INGREDIENTS USED IN SKIN CREAM

The raw materials used in the manufacture of skin creams are:

### 1. Water:

Cream's principal ingredient, and by far the most important. These are the least expensive and easiest to obtain. Water is used as a solvent to mix with other ingredients in skin creams. Of course, water free from any toxins or adulterants and microorganisms suitable for one making Asiatic snowflake cream.

### 2. Oils and waxes:

Crems contain oils, fats and waxes. whatever their function-waxes act as emulsifiers, fats thicker and oil paints as preservatives (fumigants).

### 3. Mineral oil:

It is an odorless, highly refined oil that is often used in cosmetics. Anti-sickness reactions are rare with mineral oil paints, and they don't harden or block skin pores. It is lightweight and inexpensive, reducing body water loss while keeping your body hydrated. Cosmetic mineral oil paints include liquid paraffin, liquid petroleum, and the like.

### 4. Vegetable oil:

It creates a protective film on your facial skin, slowing the loss of moisture and keeping it moisturized. In addition, vegetable canvas can also be used to increase the consistency of creams and special care lipids during oil painting areas.

### 5. Waxes:

Medicinal-use creams include beeswax, carnauba wax, ceresin and spermaceti. Cosmetics use wax to keep oil and liquid ingredients from coalescing. These waxes thicken the consistency of lipid and attach to facial skin.

### 6. Fats:

Cream is made with different kinds of fat. Such equipment can be gotten from monsters, stores or ores.

### 7. Lanolin:

Obtained from lamb wool fat. There are two kinds of lanolin. Hydrated lanolin contains 24-30% water. Anhydrous lanolin is 37°C to 42° C in temperature with a mild odor. These product provide a lubricating effect to the facial skin, making it soft and smooth. Lanolin facilitates fusion and works well with other materials used in decorative products.

### 8. Colours:

But before advanced technology was discovered, colors were made from natural substances like turmeric, saffron and indigo. Colors have been manufactured in laboratories since the 19th century, but are more stable and less intense. They can also be made without shops taken from the wild.

### 9. Humectants:

They are crucial multifunctional ingredients that appear in most skin care terms. Humectants are hygroscopic biomolacules. They are moisture absorbing or retaining pieces of furniture. They have numerous benefits, including moisturizing and exfoliating. Some examples of humectants include glyocerin, Cellulose, Cystadane, sodium borax Moisturizers are also used in soaps to add moisture. They go on your hair when it gets dry and cracked up by the soap. Surfactants play a role in stability at low temperatures and thawing; if the soap globules were to come apart, there would be no more soapy water. The two main types of surfactant are alcohols that function as an antifreeze (anionic type) or glycerides with sodium carbonate (non-ionic type), which keep the.

**10. Scents:**

It is used in a number of products to produce an agreeable odor and to cover the essential smells given off by some ingredients. Commonly used in all kinds of cosmetics.

**11. Vitamins:**

The role of vitamins in maintain the physical functions of the entire part of body, including skin. Creams are often applied with vitamins A, B, C and E.

**12. Preservatives:**

In expression, correction through use of cosmetic preservatives. Antioxidants can also cover oxidation caused by the attack of oxygen. With little thought, synthetic preservatives preserve products well too.

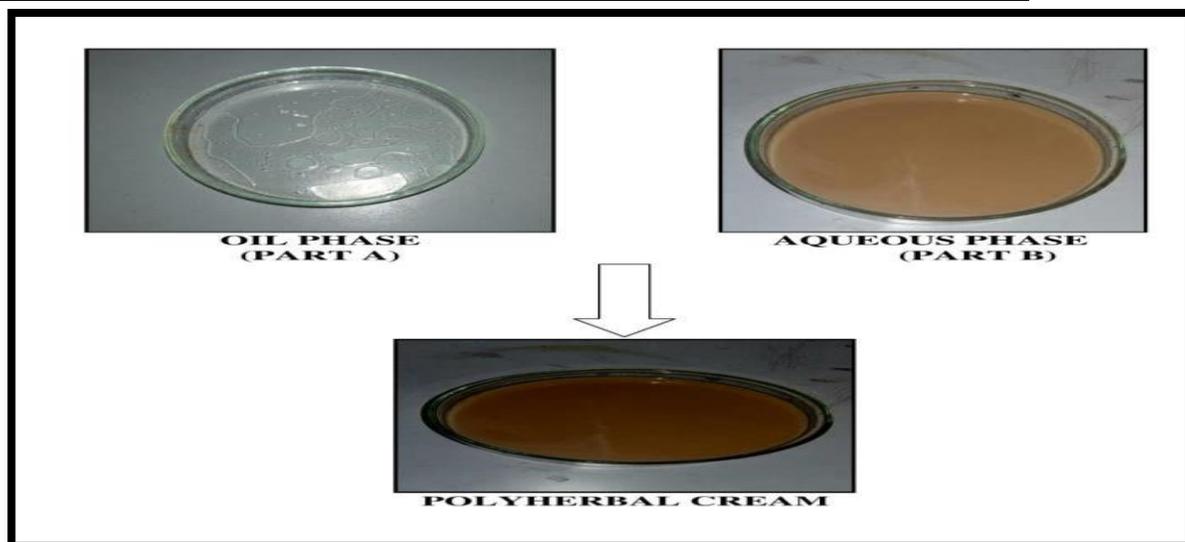
**PREPARATION OF METHOD**

- Cream preparation and assessment:
- Making the cream.<sup>[11]</sup>

Oil-soluble oil components were dissolved in O phase (A) and heated to 75 °C. Thereafter, preservatives and other water-soluble ingredients are added to the W phase (Part B) which is heated up to 75 °C. A portion of the O phase is added, stirring continues until emulsifier cools. The formula is shown in Table 1.

**Table No 1: - The ingredients used to make oil phase and aqueous phase of cream.[11]**

Constituent	Product	P1	P2	P3	P4
O/W	Octadecanoic acid	2.4	0.1	1.1	1.4
	N- hexadecyl alcohol	2.4	0.1	1.4	1.4
	Almond oil	1.4	1.4	1.4	1.4
W/O	Active extract	1.2	1.2	1.2	1.2
	Sterolamite	1.1	1.1	1.1	1.1
	Glycerole	1.4	1.4	1.4	1.4
	Phenyl Methnol	1.1	1.1	1.1	1.1
	Distil Water	aqueous	aqueous	aqueous	aqueous



**Figure 2: Preparation method of cream**

## EVALUATION OF CREAM

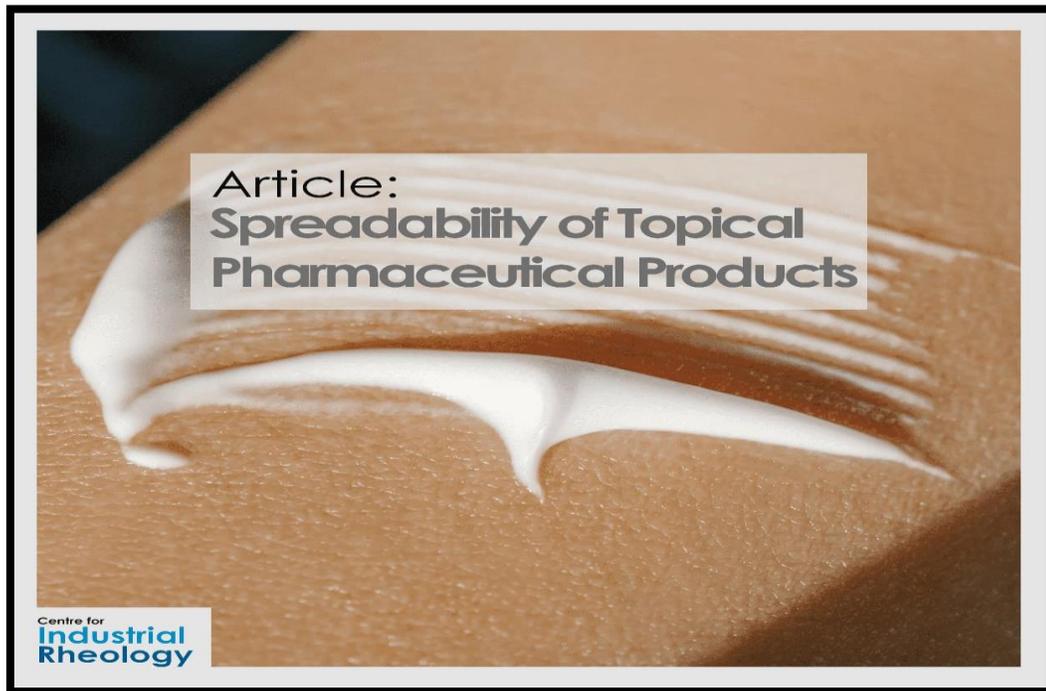
### 1. Determination of physical parameters

They are classified according to color, luster (or pearliness), roughness and grade. The pH was measured for each item of cream by dissolving 0.5 g 50 milliliters of distilled water following calibrating the pH with a standard buffer. Brookfield viscometer was used at 100 rpm, spindle #7 and uniformity through visual inspection or by tactile sensation.

### 2. Determination of robustness

In this evaluation method, 3 g of cream was placed between two glass slides, a 1000 g weight was placed on the cream, and the cream was pressed for 5 minutes to obtain a film of constant density. Then, a 10 g weight was added and the plate was stretched. Next, move the top slide on the bottom of his plate so that he covers a distance of 10 g. The diffusivity (S) can be calculated using:

$$S = m \times L/t$$



**Figure 3: Spreadability test**

### 3. Determination of emulsion type<sup>[12]</sup>

Dilution test To see the type of emulsion. A dilution experiment was carried out on it. Emulsion diluted with water or oil, O/W type or W/O type. But because water is a dispersing medium, O/W emulsions are stable when diluted with water. Even when diluted with water, O/W cream is stable. Diluting with oil breaks the emulsion. Add water instead of using oily liquid to break down W/O cream. O/W emulsions are easily dilute in water, while W/O emulsions get dispersed by oil.

### 4. Solubility test

To perform this method, a water-soluble dye (amaranth) must be mixed with an emulsion and observed under the microscope. O/W emulsions are red (continuous phase).

## 5. Resolution of chemical specifications

an area (1 cm<sup>2</sup>) on the left after surface. Cream was applied, and time noted. For use up to 24 hours. Check periodically for irritancy, erythema and edema (redness). And report.

## 6. Stability tests

1. **Agitation test:-** After place the needed amount of solvent cream containers on a reciprocating Stering, Stering for 24 hours at room temperature. At (60 cycles/min), signs of separation appeared.
2. **Centrifugation test:-** For this, put 6 g of liquid cream in a centrifuge tube and spin at 3500 rpm for half an hour. Signs of separation were observed. Accelerated stability study<sup>[13]</sup> This was undertaken to observe the formulation at 45°C ± 1 ° C for a period of seven days. Two of his other formulations were observed indoors at 45°C ± 1 ° C for 21 days, and on days 0, 5, 10, 15.
3. **Chemical degradation test<sup>[13]</sup>:-** This was accomplished by monitoring the formulation at 45°C ± 1 ° C for one week. Two other formulations were observed indoors under at 45°C±1°C for 21 days and on days 0,5, 10.

## SUMMARY

Test	Poor	Good	Very Good
Irritancy			Very Good
Wash ability			Very Good
PH		Good	
Viscosity		Good	
Phase separation			Very Good
Spred ability			Very Good

## CONCLUSION

Creams are topical medicines used to treat or cure a variety of local or skin-related problems, such as: B.- Psoriasis. Compared to other conventional processing systems, it is most preferred. This has a number of advantages, combine Accommodation in use, fewer side effects because additives are not needed and the process is noninvasive. It moreover allows for an easier treatment schedule with greater patient compliance as well (than other treatments).

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