



## Cold Cream and Vanishing Cream



# INTRODUCTION

- In Cold creams are defined as
- “semisolid emulsions of either oil in water or water in oil type.”
- “semisolid emulsions usually medicated, intended for external application.”.



**Pond's Extract Company's Vanishing Cream.**

**POND'S EXTRACT COMPANY'S VANISHING CREAM**  
CLINTON, CORN., U.S.A.

THIS Cream is an instant beautifier when lightly applied with the tips of the fingers. It is immediately absorbed by the skin, and leaves a beautiful complexion and can be used at any time without injury to the pores or skin.

It is non-drying, non-sticky, and will not prevent the growth of hair on the face, as is true with astringents, and hairdressers, but cleanses and invigorates, softening even the most sensitive skin without producing any redness.

It may be rightly called the "Maquillage of the Toilet," for it removes blemishes instantly.

It is definitely effective for chapped hands or lips, and all blemishes and eruptions of the skin. It is most absolutely produced by a scientific process.

PRICE: Small Size, 1/2; Large Size, 5/8 per Jar.  
Collapsible Tube, 1/2.

**Pond's Extract Company's Cold Cream.**

**POND'S EXTRACT COMPANY'S COLD CREAM**  
CLINTON, CORN., U.S.A.

THIS is a thoroughly dependable and safe beautifier. An ideal skin food which cleans, soothes and invigorates. Composed of choice and nutritious ingredients, its purity and excellence are always retained. Softening and refreshing, it is delightfully effective in case of sunburn, windburn, or radiation caused by outdoor exposure. It also prevents chapping and soothes dry or weather-cracked skin, protecting that essence of skin texture which is essential to a clear complexion.

Should be examined lightly over the face, arms and hands. It is not necessary to use more than a slight quantity.

PRICE: Small Size Jar, 4/8; Large Size Jar, 8/8.  
Collapsible Tube, 1/2.

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# THE SKIN CARE CREAMS CAN BE CLASSIFIED ON THE FOLLOWING BASIS:

- According to emulsion type:

1. **W/O** creams Eg: Cold cream
2. **O/W** creams Eg: Vanishing cream.

- According to function:

Eg - cleansing, foundation, moisturizing etc.



# VANISHING CREAM

- Vanishing cream gets the name from the fact that it **leaves no trace when rubbed** into the skin.
- These are **oil in water emulsions** that contains large percentages of water and stearic acid or other oleaginous components.
- After application, the continuous phase evaporates, leaving behind a thin residue film of the stearic acid.



## IDEAL PROPERTIES OF VANISHING CREAMS

1. High melting point
2. Pure whiteness
3. Very little odor and low iodine number
4. Rubbed easily on the skin



# MAJOR INGREDIENTS USED FOR THE PRODUCTION OF VANISHING CREAMS

## Stearic acid

- Major component of vanishing cream
- Good quality **triple pressed** must be selected
- Soap formed in-situ by the reaction between a suitable alkali and stearic acid **determines hardness of the cream.**
- ✓ **USE** : Governs the consistency of the cream

## Humectants

- **Glycerol most favored** followed by sorbitol and propylene glycol
- ✓ **USE**: Prevents excessive drying out of cream

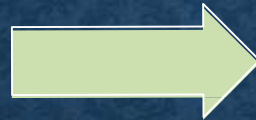
# Alkali

- Examples are Potassium hydroxide, sodium hydroxide, sodium carbonate, triethanolamine and borax.
- **Potassium hydroxide is mostly used** since makes a cream of fine texture **without excessive harshness**.
- Sodium or potassium hydroxide **when used alone forms hard cream** hence used always in combination.
- **Borax used in combination with potassium hydroxide or triethanolamine** to form white emulsion.
- **Carbonates** not favoured, **liberates CO<sub>2</sub>** and creams become spongy.

Stearic acid provides oil phase and 20-30% of free acid neutralized by alkali



Emulsifier as soap from KOH (IN SITU)



### VANISHING

CREAM in which oil phase melts above body temp and crystallizes as invisible form to give a non greasy and shiny layer on skin



# FORMULATION OF VANISHING CREAM

- Ideal formula

Ingredients	Quantity (%w/w)	Category
Oil Phase		
Stearic acid, triple pressed	15.0 %	
Cetyl alcohol	0.50 %	Emollient, water-absorptive, and emulsifying properties
Isopropyl myristate	3.00 %	Nongreasy emollient
Aqueous Phase		
Sodium Hydroxide	0.18 %	Alkali
Potassium Hydroxide	0.50 %	Alkali
Glycerol	5.0 %	Humectant
Water	75.82 %	Vehicle
Perfume	q.s.	Fragrance
Preservative	q.s.	Antimicrobial

# PROCEDURE

1. Dissolve the sodium hydroxide and potassium hydroxide in water, add glycerol and preservative and heat to 80°C.
2. In another vessel, melt the stearic acid, cetyl alcohol and isopropyl myristate (oily phase) and heat to 75°C.
3. Add the alkali solution to the melted oily phase with good agitation.
4. When the mixture has cooled to about 45°C, add the perfume and continue slow mixing until cool.
5. Cover and let it stand overnight. Remix briefly next day before packaging.

## NOTE:

- The alkali reacts with some of the stearic acid to form a soap which then acts as emulsifier.
- The polyol (glycerol) prevents loss of moisture.
- Sodium stearate crystals gives pearly shine .

# PRODUCTS AVAILABLE IN MARKET



**COLD CREAM**

# COLD CREAM

- It is an emulsion of **water in oil (w/o)** type.
- Used as moisturizer, makeup remover and cleanser.
- The main principle of cold cream involves **slow evaporation of water phase which leads to cooling sensation.**
- Borax , beeswax are used as an emulsifying agent.



- Cold cream is protective to the skin.
- Formula contains **Borax and Beeswax**.
- Borax soap is obtained by free acids in the beeswax and borax (sodium borate).
- The sodium soap obtained gives **oil in water (o/w) emulsion**.
- On storage, **PHASE INVERSION** occurs and **water in oil (w/o) emulsion cream is formed** and this is often known as cold cream.
- On application, **due to evaporation of water, cold sensation is observed**, hence, it is **called as cold cream**.
- Oily film remaining **on the skin gives emollient action and protection** to the skin.

## IDEAL CHARACTERISTICS OF COLD CREAM

- Should have optimum pH (4.6-6).
- Consistency should be optimum
- Should **not be sticky**
- Should be **attractive in appearance**
- Penetration through **epidermis of skin should be desirable.**
- Must be **non-irritant and non-inflammatory.**
- Should give **cooling effects.**



## INGREDIENTS USED FOR PREPARATION OF COLD CREAM

➡ **Normally the following ingredients are used:**

1. Mineral oil ( liquid paraffin )
2. White beeswax : Thickening agent and emulsifier (Base for the cream)
3. Borax: Used as emulsifier and responsible for the whiteness of cold cream.
4. Alcohol, glycerin, and lanolin
5. Perfume: Provides Fragrance



- Cold cream was traditionally based on a mixture of natural waxes and vegetable oils (beeswax and olive oil) stabilized with borax.
- In a cold cream the proportion of fatty and oily material predominates, but application to the skin results in a cooling effect which is produced from slow evaporation of the water contained in the emulsion.
- Replacement of part of the mineral oil with up to 15% of petroleum jelly can be used to produce different textures and consistencies. Further substitution with fatty acid esters such as isopropyl myristate improves the thixotropic behaviour of the cream, thus improving its spreading properties.

# FORMULATION OF COLD CREAM

- Ideal formula

Ingredients	Quantity (%w/w)	Category
Oil Phase		
Mineral Oil (Liquid Paraffin)	45.0	Used as solvent and emollient
Beeswax	16	Thickening agent and emulsifier
Aqueous Phase		
Borax	1	Emulsifier and provide whiteness
Water	to 100	
Preservative	q.s.	Antimicrobial
Perfume	q.s.	Fragrance

# PROCEDURE

- Heat the mineral oil and beeswax in a jacketed vessel at 75°C and maintain heat.
- In another container, dissolve borax and preservative in water and heat to 75°C (Aqueous phase).
- Slowly add this aqueous phase to the mineral oil-beeswax heated oily phase.
- Cool to 35°C and add perfume.

# PRODUCTS AVAILABLE IN MARKET



# USES

## ➡ For Vanishing cream

- Used as adhesive for makeup powders.
- Reduces loss of moisture from dry skin.
- Smoothens the skin and keeps it soft.
- Prevents skin from roughening and chapping.

## ➡ For Cold cream

- Typically used to cleanse the face off makeup
- Heavily moisturises dry skin.
- Can also be used as a balm for dry cracked lips.
- It can also be used as a shaving cream alternative for men.

**THANK YOU**