

COSMETICS FOR THE EYES

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INTRODUCTION

Eye make up has been used for thousands of years.

Materials used by ancient civilizations include

‘kohl’(antimony trisulphide) malachite (green tint) tsocco (antimony) and peruvian bark

- ⊙ Egyptian women –kohl and malachite
- ⊙ Indian women –tsocco
- ⊙ Japanese and Chinese –peruvian bark

- ◉ Eye shadows
- ◉ Mascara
- ◉ Eyebrow pencil
- ◉ Eye cream
- ◉ Kajal



- Eye is a very sensitive organ. Therefore , cosmetics for use in the eye area should be made from pure, safe, non toxic and non irritating materials.
- Raw materials relevantly used in eye preparations are pigments, fats and waxes, gums, preservatives, perfumes.



EYE SHADOWS

- ◉ Eye shadows are used to give a background of colour to the eye.
- ◉ Eye shadow may be either in solid form or in liquid paste form.
- ◉ Solid form eye shadows may be a powder compact type, oil based stick type or pencil type.
- ◉ Liquid paste form eye shadows may be in oil base paste or emulsion type (o/w or w/o type)



e.l.f. Liquid Eyeshadow

Gold Sultry Satin Misty Mauve Berrylicious Coco Loco Green Machine

makeupfu

QUALITY CHARACTERISTICS

- They should have good skin adhesion and should be easy to apply.
- They should not show oily luster after application.
- Their formulation should be such that they are not smudged by sweat or sebum and they should maintain a good appearance.
- They should be no change in colour after application.
- They should be non-irritant and safe.

FORMULATION

- Creams
- Liquid
- Powder or stick

CREAM EYE SHADOWS

- ◉ Cream eye shadows may be a liquefying cream or an emulsion.
- ◉ **LIQUEFYING CREAM**
 - Prepared by fats and waxes such as bees wax, lanolin, petroleum jelly, spermaceti, ceresin and odour less cocoa butter.
 - Example : formula

❑ Petroleum jelly	47.5%
❑ Liquid lanolin	4.5%
❑ Beeswax	4.5%
❑ Microcrystalline wax	8.5%
❑ Isopropyl myristate	35.0%

- To the bases, inorganic pigments are added to produce desired shade. Shades can be made lighter by adding zinc oxide or titanium dioxide .
- ❑ Ultramarine (20 parts) and titanium dioxide – blue
- ❑ Titanium dioxide (15 parts) and chromium oxide green(10 parts) - green
- ❑ Iron oxide (sienna shade 30 parts) and titanium oxide (5 parts) - brown
- ❑ blue shade and carmine - violet



- If a pearlized or translucent eye shadow is to be prepared by adding pearl essence or luster pigment to the base.
- Talc gives more cover on the skin. For pastel shade effect it can be replaced with titanium dioxide.



⊙ **Emulsion type eye shadow**

- prepared by mixing pigments into an emulsion and distributing them into base.
 - Example : triethanolamine stearate can be used as an emulsion base.
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- ⊙ Water proof cream eye shadow can be prepared by adding silicone complexes.
 - ⊙ Ex : dow corming DC-3225C fluid.

STICK EYE SHADOW

- ◉ Stick eye shadows perform the same function as the anhydrous cream.
- ◉ Their formulation and method of preparation is similar to lipsticks.
- ◉ Base should be thixotropic so that it is evenly applied without any greasy or sticky nature.
- ◉ Oils such as castor oil, mineral oil hydrogenated cotton seed oil, corn oil and waxes such as bees wax, carnauba wax, paraffin wax are used.
- ◉ Formula
 - Base 80%
 - Pigment 10%
 - Luster pigment 10%

⊙ Formula of pigment dispersed in aqueous base with small quantity of alcohol.

- | | |
|---------------------------|--------|
| ➤ Sulphated cetyl alcohol | 2.0% |
| ➤ Sorbitan mono oleate | 0.5% |
| ➤ Propylene glycol | 6.0% |
| ➤ Methyl cellulose | 1.5% |
| ➤ Alcohol | 10.0% |
| ➤ Water | 100 ml |
| ➤ Pigments | q.s |
| ➤ Preservatives | q.s |

POWDER EYE SHADOW

Powder eye shadows can be prepared either as loose powder or compressed powder.

This form of eye shadow can be applied easily.

- A base can be prepared accordingly
- Magnesium myristate 40%
- Talc 45%
- Titanium dioxide 15%
- Pigment 5-8%

opaque materials like titanium dioxide are to be removed from the formulation as it may effect the reflecting properties of pearlescent materials.

FOR COMPRESSED POWDERS

○ Kaolin	18.0%
○ Zinc stearate	7.0%
○ Talc	35.0%
○ Pigment	15.0%
○ Luster pigment	25.0%

EVALUATION OF DRY PRODUCTS (CAKE EYE LINER & POWDER EYE SHADOW)

- ⦿ For this mainly two methods are used
- ⦿ Method 1 : press a pencil eraser gently around the edges of the cake, noting the indentation depths. Evaluate against an established standard for acceptable indentation depth and appearance.
- ⦿ Method 2 : Drop the cake from an established height, such as 10 inches (25 cm). Record the number of drops required for breakage. Acceptable cakes generally show minimal breakage or chipping around the edges after three drops; this test is perform on 10 cakes to confirm reproducible result

EVALUATION OF WATER SOLUBLE PREPARATIONS (LIQUID EYE LINER AND LIQUID MASCARA)

- ⦿ Water soluble preparations colors usually faded very quickly . Equal amount of sample and standard should be poured into nestler cylinders . These tubes look like thick , flat bottomed test tubes .
- ⦿ To evaluate color and intensity a drop is applied to filter paper and compare side by side to the standard. Water soluble preparation may be analyzed by UV and visible spectroscopy .

EVALUATION OF EMULSION BASED EYE PREPARATIONS (CREAM EYE SHADOW AND EYE LINER)

- ◉ Emulsion based eye preparations evaluated by typically drawn down on M orest paper, a porcelain plate or white paper to check color and pigment dispersion streaks of color indicate the need for additional pigment mixing or milling. Placing a sample between two glass slides and pressing them together this method shows any excess air incorporated into the product . Excessive air causes a product's specific gravity to fall below specification, causing low – fill weight containers on the filling line . An improperly emulsified formulation gives an off shade product. The appearance of such liquid products is evaluated by applying them to the forearm and comparing them to a standard using the four – site pattern or on the palm

EVALUATION OF PENCILS (EYE BROW PENCIL)

- ◉ Droop test :- This test is used for eye liner pencils to check the hardness and consistency of leads. Specially designed wooden slots are used to hold the uncased leads which are placed in an oven for two hours at 40 o C. The degree of bend or drop is measured and according to that grade is assigned.

- ⊙ References :- Cosmetic Technology by S anju Nanda
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