

Overview of Cosmetic Science : Cosmetic Acts and Regulation, Body Related Problem, Care Need for Body and Manufacturing of Cosmetic Product ,Testing of Container and Closure

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Abstract: *In worldwide there uses cosmetic all over the world cosmetic enhances the beauty and attractiveness there are various law and rule to import and export the cosmetic. The problem related to the skin, hair, nail are occurring. To overcome this problem we use the cosmetic there are various product are available to use how they prepare. For the prepare product various testing is done.*

Keywords: Cosmetic, schedule, documentation, cleansing and care need for body, manufacturing, testing of container

I. INTRODUCTION

1.1 Cosmetics

Cosmetics, also acknowledged as makeup or make-up, are care substances used to enhance the looks or order of the body. They're usually mixtures of chemical compounds, some being derived from natural sources (such as coconut oil) and lots of being synthetics. In the U.S., the Food and Drug Administration (FDA), that regulates cosmetics, defines cosmetics as "intended to be applied to the body for cleansing, beautifying, promoting attractiveness, or altering the appearance without affecting the body's structure or functions. This broad definition includes any material supposed to be used as part of a cosmetic product. The federal agency specifically excludes soap from this class.

1.2 Industry

The manufacture of cosmetics is dominated by a small number of multinational corporations that originated within the early twentieth century, however the distribution and sale of cosmetics is spread among a wide variety of companies. The world's largest cosmetic companies are L'Oréal, Procter & Gamble. In 2005, the market value of the cosmetics business within the U.S.A., Europe, and Japan was valued at EUR seventy billion. Within the United States, the cosmetic industry's size was \$42.8 billion in 2008. In Germany, the cosmetic business generated €12.6 billion of retail sales in 2008, which makes the German cosmetic industry the third largest within the world, when Japan and therefore the United States. German exports of cosmetics reached €8 billion in 2008, whereas imports of cosmetics totaled €3 billion. Worldwide cosmetics Association in Nursing fragrance industry currently generates an calculable annual turnover of \$70 billion. Europe is that the leading market,

1.3 Overview of Drug and Cosmetic Act 1940 & 1945

- POSITIVE until 1930: Asian country was mostly addicted to import of recent medicines till when initial world war.
- In August 1930 the govt. of Asian country appointed a drug Enquiry Committee underneath the spot of commissioned military officer R.N. Chopra, to travel in to the question of debased & substandard medicine sold-out in country & to suggest step by that this menace might be management.
- The Drug Enquiry Committee submitted its report in 1931, the govt. of Asian country couldn't offer impact to its recommendation until 1937.

- After passing of the govt. of Asian country Act, 1935, drug became provincial subject & so center might pass law in respect of solely imports.
- The drug import Bill was ready & placed for thought before the assembly in 1939. This wasn't acceptable to the general public & provinces for uniform & comprehensive legislation. This diode to the introduction of the Indian Drug Bill within the Central legislative assembly. It had been passed & received assent of governor in Council & became Drug Act in 1940

Class of Drug Prohibited From Import

- Misbranded medicine
- Drugs of substandard quality
- Drugs claiming to cure diseases per Sch-J
- Adulterated medicine
- Spurious medicine

Class of Cosmetic Prohibited From Producing

- Prohibition of manufacture
- Manufacture of apart from in Sch-C/C
- Manufacture of these in Sch-C/C
- Manufacture of Sch-X drug

Class of Cosmetic Prohibited From Sale

- Classes of medication prohibited to be sold-out
- Wholesale of biological (C/C) medicine
- Wholesale of apart from those per CIC, and X
- Wholesale of Sch-X medicine

II. CONDITION FOR OBTANING LISCENCE FOR IMPORT DOCUMENTATION

MASTER FORMULA RECORD (MFR)

A Master Formula Record is outlined as Associate in Nursing approved master document, with directions of however the complete producing method should be performed for every batch size of every product to be factory-made. This document ensures that there's uniformity across batches of an equivalent product. The MFR should be ready, signed and dated by one competent individual, and severally checked, signed and dated by another competent person within the quality department. All process of a given batch should proceed as per its MFR.

BATCH FROMULA RECORD

Batch producing record ought to be ready from every intermediate and API formulation and will embrace complete info realeating to the producing and management of every batch

QUALITY AUDITS

A quality audit is Associate in Nursing freelance analysis performed to review if activities are performed in an exceedingly manner to go with set objectives outlined within the company's quality system. Within the pharmaceutical business, audits are a good means that of supportive if the various departments go with cGMP laws.

AUDIT:

Audits serve to verify if the assembly and management systems are operational as supposed. They help to uncover downside areas and so, enable the timely correction of problems. Regular audits facilitate to produce confidence that the organization is functioning underneath effective management. Audits performed in downside things like product recall

or continual market complaints are helpful to spot non-compliance with cGMP and to drive initiatives to require the mandatory corrective actions.

AUDIT TYPES:

Quality audits is also of 3 sorts – internal audits or self-inspections, external audit for contract manufacturing/testing and restrictive audits performed by restrictive bodies. Internal audits are done by auditors at intervals the corporate to assess cGMP compliance, determine downside areas and take corrective action, and to arrange for audits by restrictive bodies.

DISTRIBUTION RECORDS

Batches are free for distribution by the QC department solely when thorough testing and approval. The deposition department should maintain records of batches free for distribution in an exceedingly systematic manner. For each batch of product, it's necessary to take care of distribution records in enough detail to be able to trace to that places the merchandise has been sent. This is often crucial within the event of a drag with the merchandise batch that necessitates a product recall from the market.

HANDLING CAME BACK PRODUCT

Once a product recall has been initiated, the method should be monitored to make sure that the recall is completed at intervals the stipulated timeframe. A check should be performed to judge the effectiveness of the recall. Following this, Associate in nursing investigation should be allotted to review the explanation for the recall and remedial action should be puzzled out to make sure the defect doesn't reoccur.

III. STUDY OF ICH POINTERS FOR STABILITY STUDIES.

- QiA (R2) - Stability testing of recent Drug Substances and product
- QIB-Stability Testing: Photostability Testing of recent Drug Substances and product
- Q1C-Stability Testing for brand spanking new dose Forms
- QID- Bracketing and Matrixing styles for Stability Testing of recent Drug Substances and product
- QuE-Evaluation of Stability knowledge

KNOWLEDGE CONCERNING SKIN, RIMA ORIS, HAIR, NAIL AND BODY CAVITIES CONNECTED ISSUES.

SKIN REALETED DRAWBACK



FIGURE NO:1

- Acne
- Atropic dermatatis
- Shigels
- Hives
- Sunburn
- Contact dermatitis

ORAL CAVITY REALETED DRAWBACK



FIGURE NO:2

- Cavities (tooth decay)
- Gum (peridontal) illness
- Oral cancer

HAIR REALETED DRAWBACK



FIGURE NO:3

- Hair loss
- Hair infection
- Disorder inflicting haptic sensation and scaling

NAIL REALETED DRAWBACK



FIGURE NO:4

- Brittle nails
- Oncholysis

- Paronychia
- Psoriasis
- Oncomycosis

CLEANING AND CARE WOULD LIKE FOR FACE, EYELID, GUMS, DENTAL CAVITIES, HAIR, LIPS, HAND FEET, NAIL, SCALP, NECK, BODY AND BELOW ARM MAINTAIN HYGEINE

CLEANSING AND CARE WOULD LIKE FOR FACE

- Cleanser's square measure facial care product that's wont to take away make-up, dead skin cells, oil, dirt, and alternative kinds of pollutants from the skin of the face. Very dry skin could need a creamy lotion-type cleanse

CLEANSING AND CARE WOULD LIKE FOR PALPEBRA

Remember to stay your body hydrated by drinking a lot of water. Use creams that moisturize the eyelids to assist soften expression Best time to moisturize is when you shower.

CLEANSING AND CARE WOULD LIKE FOR GUMS

- Brushing the teeth properly choosing the correct dentifrice flossing daily mouth victimization solution

CLEANSING AND CARE WOULD LIKE FOR DENTAL CAVITIES

- Brush your teeth double each day with fluoride dentifrice. Floss frequently. Visit your tooth doctor habitually for a scrutiny and cleansing. Tell the tooth doctor concerning any

CLEANSING AND CARE WOULD LIKE FOR HAIRS

Daily care by brushing and brushing shampooing the hair so as to keep up its clean lines. Treatment of hair for infestation like live.

CLEANSING AND CARE WOULD LIKE FOR LIP

- Do not bit or lick your lip. Follow healthy diet. Stay hydrous by drinking heap of water Remove structure.

CLEANSING AND CARE WOULD LIKE FOR HAND

- Exfoliate the dead skin employing a serub of salt mixed with olive oil/coconut oil. Massage your hand with oil. Dip in focused tea resolution for 15-20 minutes.

CLEANSING AND CARE WOULD LIKE FOR FEET

- Washing
- Keeping them dry
- Moisturizing
- Removing Jagged skin

CLEANSING AND CARE WOULD LIKE FOR NAIL

- Manicure
- Nutritional steps in Healthy care
- Daily care

CLEANSING AND CARE WOULD LIKE FOR SCALP

- Don't forget to Preserve wet.
- Massage.
- Limit chemical treatments.

CLEANSING AND CARE WOULD LIKE FOR NECK

Moisturizer Cleanse your neck with cleansing milk or light preparation a couple of times per week to create positive there's no skin or dirt build up. Use a product developed with antioxidants to cleanse to cleanse totally, brighten and defend your skin from free radicals.

CLEANSING AND CARE WOULD LIKE FOR BODY

- Bathtub on a daily basis .make our body hydrous moisturizes

CLEANSING AND CARE WOULD LIKE FOR UNDERARM

The axilla includes a high concentration of hair follicles and sweat glands, therefore inflicting hyperbolic sweating during this space of the body. It is additionally packed with body fluid nodes, Associate in nursing integral a part of the lymphatic system that aids your body in fighting infection. Regular care will leave you with satiny swish skin and a body ready against everyday infections and microorganism.

FORMULATION THOUGHT FOR ETHNIC DESIRES OF COSMECEUTICALS LIKE MOISTURIZING CREAM.

LIGHT TEXTURES FOR ASIAN SKIN

- Asian skin ages less speedily than Caucasian skin, however once aging begins, it's quicker and related to
- Problems like hyper pigmentation Associate in nursing a way over secretion.
- The SEPPIC solution: ingredients and formulas that manufacture ultra-light, non-greasy textures containing littler no fragrance. SEPPIC produces an entire vary of anti-aging, anti-stress, soothing and brightening products.

MOISTURIZATION FOR AFRICAN SKIN

- African skin is thicker and ages less speedily than white skin. However it's additionally vulnerable to dehydration, skin disorder and coloration problems. Additionally, kinky unsmooth hair is usually weakened by chemical treatments, relaxers and weaves.
- The SEPPIC solution: ingredients and formulas to unify the complexion, moisturize and purify the skin, and restore strength and wonder of hair fibers.

Miniaturization and protection for Latin skin

Latin skin is thicker and ages little, thus it's less likely to wrinkle. However, it's a lot of vulnerable to skin disorder, even later in life.

PREPARATION AND ANALYSIS OF OINTMENT CREAM OR LOTION



FIGURE NO:5

Place a 150-mL beaker on a balance and weigh it. Weigh the quantities of cetyl alcohol, benzophenone-3, ethylhexylmethoxycinnamate, saturated fatty acid, glycerin, and stearyl dimethicone salt crosspolymer required in your

assigned formulation from Table one into the 150-mL beaker. Heat the beaker with the organic mixture during a water bathtub till all the ingredients have liquified, because they will scorch or decompose if they're heated a lot of higher than the boiling purpose of water. Live seventy eight g of water into a 400-mL beaker. Add 1.0 g of triethanolamine to the water. Stir. Heat the water resolution to a temperature of 80° to 85°C. when the water resolution has reached a temperature between 80° and 85°C, take away it from the warmth and slowly pour the liquified cetyl alcohol, benzophenone-3, ethylhexylmethoxycinnamate, saturated fatty acid, glycerin, and stearyl dimethicone salt crosspolymer mixture into the water a bit at a time, stirring perpetually. It should be useful to carry the 400-mL beaker employing a try of beaker pair of tongs. (Note: If the "organic mixture" has solid, heat shortly within the water bathtub to remelt it.) If you pour too quickly or if you are doing not stir, your emulsion are going to be lumpy or the mixture might not form associate emulsion. Continue stirring till you've got a sleek, uniform paste. Label the beaker and set the ointment cream aside to cool down

PREPARATION AND ANALYSIS OF STICK FRAGRANCE

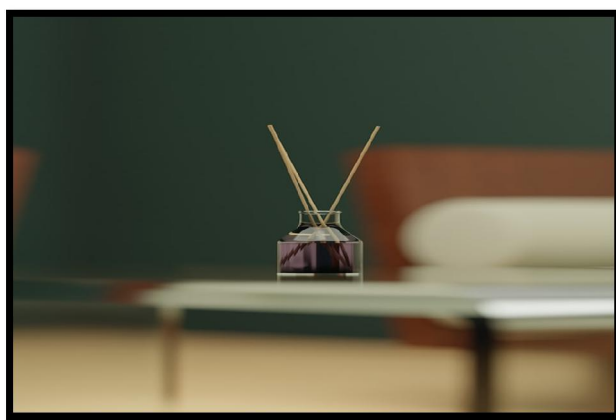


FIGURE NO:6

All the plant powders and scrap were taken in a very clean, dry mortar and pestle and macerated finely. Cow's milk was poached, and drawn butter was additional in it and once more digested on a hot plate for jiffy. This combinatory was then additional to the powder mix and once more macerated finely to get a fine paste. A plastic syringe was cut from the top facet thus on open the mouth of the syringe fully. Droop sticks were created victimization the opened syringe and a plunger. These dhoop sticks were dried for four days in Associate in Nursing kitchen appliance at forty 0C then hold on in Associate in Nursing air tight instrumentation. When storage for a month, the sticks were used for analysis of cleansing activity

PREPARATION AND ANALYSIS OF PERFUMING OF POWDERS/ COLOURED POWDER



FIGURE NO:7

Take 0.5 g of metallic element stearate, seven g of talc, 0.25 g of oxide, 0.5 g of carbonate and a pinch of mixture containing clay, silicon dioxide and starch during a grinder. Grind all the ingredients taken within the grinder manually and properly. Add 1-2 drops of fragrance.

PREPARATION AND ANALYSIS OF TABLET

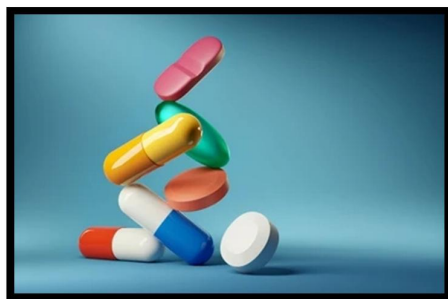


FIGURE NO:8

WET GRANULATION TECHNIQUE

Weigh all ingredients accurately, combine well and triturate by mistreatment mortar and pestle. The ready 1 Chronicles binding agent was supplemental slowly to create a humid mass. Damp mass was transfer through sieve no. 22. Ready granules area unit dried at temperature. The well dried granules area unit prepared for compression.

PERFORM TOXICITY STUDY AS PER DRUG AND COSMETIC ACT COSMETIC PRODUCT CYTOTOXICITY

This is the only kind of drug toxicity, where the drug or a full of life matter causes serious injury to the cells. The cells of a specified organ area unit affected, causing a probably fatal loss of operate of the liver or excretory organ, injury to the eyes or ears, or abnormal action of the blood.

CARCINOGENICITY

A matter is any substance, radionuclide, or radiation that's associate agent directly involved in inflicting cancer. Several radioactive substances area unit considered carcinogens. Examples: inhaled asbestos and tobacco smoke.

MUTAGENICITY

Some medication will cause permanent changes tithe DNA of germ cells egg cells and sperm cells - resulting in mutations that area unit inherited by a patient's youngsters. Example chemical compound

TERATOGENICITY

Some medication will cause defects within the development of the craniates, resulting in gross abnormalities of the baby Depends on completely different the various} stages of organs develop at different times throughout gestation. Example: Thalidomide

PERFORM INTERNAL CONTROL CHECK FOR CONTAINERS, CLOSURES AND SECONDARY PACKING MATERIALS UTILIZED IN COSMETIC TEST FOR CARTONS

This technique is employed to access the strength of erected package. Compression

CARTON GAP FORCE

The method is employed to carry the flat carton as delivered, by its creases between thumb and Trist finger press.

COEFFICIENT OF FRICTION

Both static and kinetic coefficients of friction are determined by slipping the specimen over itself below specific check conditions.

CREASE STIFFNESS

This involves testing a carton board piece and folding it through ninety, it will then attempt to recover its position once bending force is removed. Joint shear strength this may be a technique of testing affixed lap seam on the facet of a carton for strength of the adhesive inflicting a tensile testing machine.

QUALITY CONTROL CHECK FOR GLASS CONTAINERS

FINE-GRAINED GLASS TEST:

Done to estimate quantity of alkali leached from the fine-grained glass, which usually happens at elevated temperatures. Sample containers are unit rinsed with refined water and dried. The instrumentation area unit grinded in a very mortar to a fine powder and labor under sieve no.20 & 5010gm of sample is washed with resolving and dried.50 cubic centimeter of refined water is additional to the dried sample and autoclaved at 121°C for 30min and cooled and decanted. The decanted liquid is titrated with zero.02N H, SO, mistreatment alkyl red as indicator.

HYDROLYTIC RESISTANCE OF GLASS CONTAINERS:

Each instrumentation is rinse a minimum of 3 times with co, free water and fled with same to their filling volume. Vials and bottles are unit coated and autoclaved at 100°C for 10mins. blumeblumeef 00IM

The temperature is up from one hundred C to 121°C over 20mins. The worker. Is maintained at one 21°C to 122°C for sixty e associate 1 however e than a pair of Minute. Menetham five betone ME than ten the containers are unit cooled and therefore the liquids are unit

ARSENIC CHECK

The check is for glass containers supposed for binary compound parenterals. The inner and outer surface of instrumentation is washed with contemporary Distilled water for 5min. Then similar steps are unit followed as performed within the hydrolytic check, previously described. Till getting combined solutions. 20ml from the ultimate combined volume is pipetted out associate thereto 10ml of HNO₃, is additional associated dried in a kitchen appliance at a hundred thirty C. 10ml of H molybdate is additional and refluxed for twenty five minutes. It is cooled and absorbance is measured at 840nm.

QUALITY CONTROL CHECK FOR CLOSURES

RESIDUE ON EVAPORATION

50 ml of answer A is gaseous to status on a water tub and dried at 105°C. The residue weighs less than 4mg

STERILIZATION TEST:

The closures used to the preparation of the sample answer shall not soften or become tacky and there shall be no visual modification within the closure.

PH OF BINARY COMPOUND EXTRACT:

To 20ml of answer A, 0.1ml of acid-base indicator answer is added NMT zero.3ml of 0.01M NaOH or zero.8ml of 0.01M HCl is red, to alter the color of the answer to blue or yellow severally.

SELF STABILITY CHECK

cut 10 times with needle. Immersed in zero.1% methylthionine chloride answer and subjected to a pressure of regarding twenty seven Kpa. Restored to ATM pressure and created to face for 30mins. Traces of colored answer mustn't be found

IV. CONCLUSION

The use of cosmetic is wide. there are many cosmetic product available for clansing and beautifying the body the body realeated problem oral cancer hair loss, brattle nails etc. to take care of our body parts and cavities is very essentials.there are various schedule under the SCH-H,J,I etc .to import and export the drugs that are under the guidelines of Drug and cosmetic act (1940) .the manufacturing and processing of cosmetic product us eof various ingredient these .Another there is testing of closure and containers is perform.

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