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Drugs used in the Production of Cosmetics and their Applications

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Short Communication

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ABSTRACT

Cosmetics are made up of mixes of chemical components that are either derived from natural sources or generated synthetically. Cosmetics serve a variety of functions. The body or skin can be cleansed or protected using those intended for personal care and skin care. Makeup or cosmetics intended to improve or change one's appearance, can be used to hide flaws, accentuate natural characteristics (such the eyebrows and eyelashes), add colour to the face, or completely alter the face's appearance to resemble another person, animal, or object. Cosmetics may be created to enhance body scent.

DESCRIPTION

Toluene

Toluene is a clear, water-insoluble liquid with a distinct paint thinner-like odour. Toluene is a common industrial solvent that is used to create paint thinners, rubber, nail polish, nail glue, and other cosmetic items like nail polish, nail glue, and hair dyes. It is used to make nylon, polymers, polyurethane, fuel, benzene, and gasoline. Under the names benzene, toluol, phenyl methane, and methylbenzene, toluene can be found on cosmetic labels.

When products like adhesives, paints, paint thinners, and nail polish are used, toluene is released into the environment. People who work with paint, lacquer, or dyes are more likely to be exposed to toluene through their skin and respiratory systems because it quickly mixes with the air. Prenatal toluene inhalation has been linked to newborn outcomes such as intrauterine growth restriction, early birth, congenital abnormalities, and postnatal developmental retardation [1-3].

Dibutyl phthalate

DiButyl Phthalate (DBP) is a synthetic chemical used as a plasticizer. It can be found in paints, glue, insect repellents and hairspray, nail polish, and rocket fuels and is used to make plastics more flexible. It is a perfect ingredient for cosmetic and cosmetology products because of its flexibility and film-forming characteristics. However, DBP is also used in hair sprays to assist prevent stiffness by allowing them to form a flexible film on the hair. DBP is mostly used in nail products as a solvent for dyes and as a plasticizer to prevent nail paints from becoming brittle.

The European Union has banned the use of dibutyl phthalate because it has been related to problems with human reproduction if the woman is exposed while she is pregnant. Additionally, certain phthalate esters have been demonstrated to be hazardous to the reproductive system in animal models.

Formaldehyde

Exposure to formaldehyde, which is an odourless, colourless substance that is highly volatile, could be hazardous to both clients and employees. Formaldehyde is categorised as a human carcinogen by the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA). With potential connections to brain cancer and leukaemia, formaldehyde has been linked to nose and cancer.

Formaldehyde is a gas that is released by a number of popular hair-smoothing treatments, according to growing research. Brazilian blowouts, Cadiveu, and Keratin Complete Smoothing Therapies all frequently use formaldehyde as a component. Four laboratories in California, Oregon, and Canada verified that the Brazilian Blowout, a popular hair straightening procedure, contains between 4% and 12% formaldehyde. Other keratin-based hair smoothing products have also been shown by Oregon OSHA to contain formaldehyde, with levels ranging from 1% to 7%.

Formaldehyde can be found in hair smoothing products or in the air as a vapour. Formaldehyde can be inhaled into the lungs and respiratory system by stylists and clients. Additionally, the mucous membranes in the eyes, nose, or throat may come into contact with formaldehyde vapour. The application of liquid hair straighteners may cause the skin to absorb formaldehyde solutions. At room temperature, formaldehyde solutions can emit formaldehyde gas; heating such solutions might hasten this reaction. Heat is frequently administered to the therapy, such as when blow-drying or flat-ironing, which exposes the patient [4-6].

Applications

- By using cleansers, toners, serums, moisturizers, and balms, skin care products can be utilized to wash, scrub, protect, and nourish the skin. The body can be cleaned using cosmetics made for more general personal care, such shampoo and body wash.
- Cosmetics used to improve appearance can be used to hide imperfections, highlight natural features, add colour to the face, and—in the case of more extreme types of makeup used for performances, fashion shows, and people wearing costumes—can be used to completely alter the appearance of the face to resemble a different person, creature, or object. Contouring is a technique for altering look that tries to give a certain area of the face form.

CONCLUSION

Many of the cosmetic items on the market at the time were still either chemically questionable or made from ingredients that were frequently found in kitchens, like food colouring, berries, and beets. Examples of widespread detrimental cosmetic use include the use of ceruse (white lead) in many different civilizations, such as during the Renaissance in the West, and the early 20th century blindness brought on by the mascara Lash Lure. Due to the use of red and white lead makeup and powder throughout the 19th century, there were numerous instances of lead poisoning, which resulted in swelling and inflammation of the eyes, compromised tooth enamel, and darkening of the skin. Heavy use was also known to result in death.

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