

A Review of Perfumes in Cosmetic Products

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Abstract

A fragrance or perfume compound is defined as a multi-component mixture or a blend of fragrance ingredients; any basic substance used in the manufacture of fragrances for their odorous, odour-enhancing or blending properties. These ingredients may be obtained by chemical synthesis from synthetic or natural raw materials or by physical operations from natural sources⁽¹⁾.

In many cosmetic products, perfumes are unarguably a fundamental constituent as they are designed to impart pleasant and memorable odour or flavour. The odour from a perfume can give a cosmetic product a unique market signature, for example, defining it as feminine, masculine, refreshing, invigorating, comforting or cleansing. The list of odour perception is inexhaustible. These features and roles perfumes have in cosmetic products have been exploited both personally (attraction of opposite sex) and commercially (billion dollar industry) from ancient to present times.

An increase in the occurrence of skin contact dermatitis has been well documented. Perfumes as constituents of cosmetic products may be one of the contributing factors. In this article, the nature of perfumes, their function and safe use in cosmetic products will be examined in some detail. The roles and impact of perfume ingredients on health issues as instigated through IFRA, the perfume industry association, by studies and control measures in the form of Monographs of Fragrance Raw Materials⁽²⁾ and the more recent Quantitative Risk Assessment methodology for the calculation of perfume allergens in cosmetic products, will be discussed.

Also to be discussed are the European Union's (EU) regulatory approach (7th Amendment of the Council Directive 76/768/EEC)⁽³⁾ to protecting the consumer from induction or elicitation of perfume allergy through use of cosmetic products.

Introduction

Perfumery as an art dates back many centuries and covers all areas of the world and times in history. Many rituals and traditions involved odours derived from perfumes and essential oils. It is evident from the exquisite perfume bottles depicted in Egyptians hieroglyphics and artworks that perfumery was practiced and used for embalming purposes. Other historical evidence relates to India and their incense based perfumes dating back to the 7th century with the use of Agarwood oil. Around the 14th century, trading with merchants from the Middle East resulted in the introduction of perfumery into Europe. France subsequently developed into the European capital of perfumery, with its modernised extraction methods and reputation for good qualitative and quantitative materials. The Grasse region is also considered by perfumers as a valued training arena. Today, the perfumer's pallet can consist of about 5,000 different materials collected for their odour properties. These can include natural extracts, synthetic chemicals and/or specialty blends. The collection of materials is chosen because of their odour, safety, performance, stability and price.

A complex mixture of aromatic materials that give a concentrated smell can also be defined as a perfume. The term perfume or 'parfum' for ingredient listing of cosmetic products in accordance to the International Nomenclature of Cosmetic Ingredients (INCI) is used in Europe, whilst the official term is fragrance in the United States of America (USA). Aromatic materials with perfuming functions also include essential oils and individual aromatic compounds such as Limonene. However in the fragrance industry, the terms perfume and fragrance are interchangeable. It is noteworthy that each perfume formula is unique and is thus considered an invention and a work of art to be protected by intellectual property.