

Fragrance and Cosmetics—Sharing Strategies

Two common components in the daily routine of many consumers include fragrance and personal care products. Men and women regularly wash and shave; apply moisturizer, makeup and deodorant; spritz hairspray; and apply their favorite fragrance before leaving their homes. The dynamic duo of fragrance and personal care products share more than consumer demand—they share their formulators' quest for global harmonization, need to meet consumer demands and overall concern for the safety of consumers.

Ladd Smith, president of the Research Institute for Fragrance Materials (RIFM), explained some of the issues faced by the fragrance industry.

Living in Harmony

Global harmonization is a buzzword often heard in the personal care industry. The industry continues to seek ways to collaborate in areas such as differences in use levels of certain ingredients between different countries, varying test methods for parameters such as SPF protection, and a unified nomenclature to refer to these materials.

In parallel, the fragrance industry has sought answers to collaborate on ways to harmonize. In 1966, RIFM was formed in part to aid in this quest.

"The wisdom in 1966 was to [say] look, we're all in this together and there are some common needs that we have. Why don't we cost-share and do this in a standard way?" explained Smith. He said that RIFM serves as the underwriters of the fragrance industry. "We gather the information [on materials], do the risk assessment, our expert panel draws a conclusion, and if necessary, there's an International Fragrance Association (IFRA) standard issued. If not, we publish the data otherwise."

The conclusions of RIFM form a basic usage standard.

A proposal was introduced in Europe for the standardization of chemicals—the Registration, Evaluation and Authorization of Chemicals (REACH) program. According

to the European Commission, the aim is to improve the protection of human health and the environment through identification of chemical substance properties. Both the personal care and fragrance industries have followed discussions of this plan, as its acceptance could impact the registration of chemicals in Europe for both industries.

Smith explained how the REACH program would affect the fragrance industry. "Basically [the program would] require registration of materials in Europe, and for various volumes there are different requirements." He explained that RIFM's research program already contains elements consistent with those requirements and is entirely consistent with the elements that REACH would require.

Formulating to the Consumer

As participants on test panel after test panel offer feedback regarding what they like or dislike about products, researchers are challenged to return to the bench to formulate to meet consumer needs. One of the latest demands in the personal care industry has been for products that are natural, which to most consumers means the product contains fewer, unaltered ingredients. The concept of a natural product often is more difficult to formulate than it appears as formulators struggle to find means to preserve products without synthetic materials.

Similar to this concept of a natural product, the simple formula—or a formula with few materials, which is not an entirely new concept—was the topic of a recent presentation given to the fragrance industry by a perfumer.

Smith explained, "In the past, only natural materials (extracts) were used in a fragrance, but now a fragrance, or what is called a fragrance compound, probably consists of anywhere from 50–200 individual ingredients."

The point of the presentation was that creating a simple formula with only a few materials really does not happen. "[The idea of] simplicity is more a perception than a

reality because we have so many things in the palette of fragrances that it's hard to stick to a simple formula," said Smith.

Defense Strategy

Protecting the consumer is a major concern to both the personal care and fragrance industries. From efficacy to absorption, to ingestion to inhalation, tests are performed on products to ensure the safety of consumers who use them. RIFM examines endpoints beyond skin sensitization to understand where the materials end up that are used in fragrance formulating.

"Environmental presence, aquatic toxicity and skin sensitization are endpoints to examine [for fragrance materials]," said Smith. "Our ultimate goal is to have fewer reports of adverse effects in the clinic, as well as to have our materials not show up environmentally. We want to design materials that are biodegradable."

One of the institute's latest studies examines the respiratory effects of fragrance materials.

"We look at effects in humans to find out whether there are any changes in respiration, any difference in allergy response and a number of other parameters." Smith said. This study began in the fall of 2005 at the University of Edmonton in Alberta, Canada.

The fabric of the personal care and fragrance industries is heavily interwoven not only because it follows similar trends, but also because it touches the lives of consumers in similar ways.

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Ladd Smith is president of the Research Institute for Fragrance Materials (RIFM) Inc., an international organization that evaluates the safety of fragrance ingredients. Previously, he was responsible for product stewardship at Occidental Chemical and involved in health care cost containment, regulatory affairs and laboratory research at GE Plastics and DuPont.



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