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## NOT SO SEXY: The Health Risks of Secret Chemicals in Fragrance

by

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Any errors or omissions in this report are the responsibility of the Campaign for Safe Cosmetics.

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#### **About the Campaign for Safe Cosmetics**

The Campaign for Safe Cosmetics is a national coalition of nonprofit women's, environmental, public health, faith and worker safety organizations. Our mission is to protect the health of consumers and workers by securing the corporate, regulatory and legislative reforms necessary to eliminate dangerous chemicals from cosmetics and personal care products.

Coalition members include the Alliance for a Healthy
Tomorrow (represented by Clean Water Action and
Massachusetts Breast Cancer Coalition), the Breast Cancer
Fund, Commonweal, Environmental Working Group,
Friends of the Earth and Women's Voices for the Earth.

The Breast Cancer Fund, a national 501(c)(3) organization focused on preventing breast cancer by identifying and eliminating the environmental links to the disease, serves as the national coordinator for the Campaign.

#### **About the Environmental Working Group**

Environmental Working Group (EWG) is a nonprofit research and advocacy organization based in Washington DC and founded in 1993. Our mission is to use the power of public information to protect public health and the environment. EWG specializes in providing useful resources (like Skin Deep and the Shoppers' Guide to Pesticides in Produce) to consumers while simultaneously pushing for national policy change.

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Visit www.SafeCosmetics.org and www.CosmeticsDatabase.com for more information.

# **EXECUTIVE SUMMARY**

A rose may be a rose. But that rose-like fragrance in your perfume may be something else entirely, concocted from any number of the fragrance industry's 3,100 stock chemical ingredients, the blend of which is almost always kept hidden from the consumer.

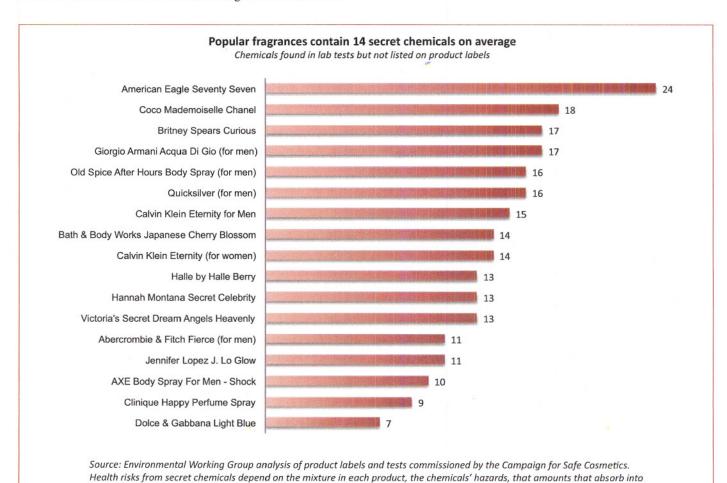
Makers of popular perfumes, colognes and body sprays market their scents with terms like "floral," "exotic" or "musky," but they don't disclose that many scents are actually a complex cocktail of natural essences and synthetic chemicals – often petrochemicals. Laboratory tests commissioned by the Campaign for Safe Cosmetics and analyzed by Environmental Working Group revealed 38 secret chemicals in 17 name-brand fragrance products, topped by American Eagle Seventy Seven with 24, Coco Mademoiselle Chanel with 18, and Britney Spears Curious and Giorgio Armani Acqua Di Gio with 17.

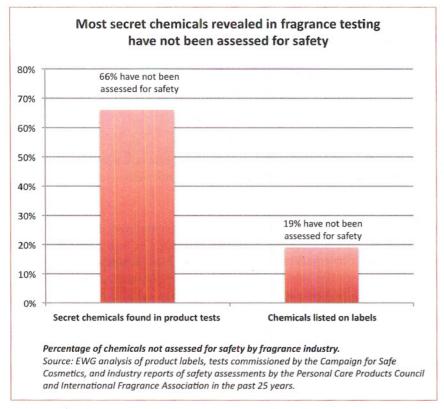
The average fragrance product tested contained 14 secret chemicals not listed on the label. Among them are chemicals

the body, and individual vulnerability to health problems.

associated with hormone disruption and allergic reactions, and many substances that have not been assessed for safety in personal care products.

Also in the ranks of undisclosed ingredients are chemicals with troubling hazardous properties or with a propensity to accumulate in human tissues. These include diethyl phthalate, a chemical found in 97 percent of Americans (Silva 2004) and linked to sperm damage in human epidemiological studies (Swan 2008), and musk ketone, a synthetic fragrance ingredient that concentrates in human fat tissue and breast milk (Hutter 2009; Reiner 2007).





This complex mix of clandestine compounds in popular colognes and perfumes makes it impossible for consumers to make informed decisions about the products they consider buying.

The federal government is equally uninformed. A review of government records shows that the U.S. Food and Drug Administration has not assessed the vast majority of these secret fragrance chemicals for safety when used in spray-on personal care products such as fragrances. Nor have most been evaluated by the safety review panel of the International Fragrance Association or any other publicly accountable institution.

Fragrance secrecy is legal due to a giant loophole in the Federal Fair Packaging and Labeling Act of 1973, which requires companies to list cosmetics ingredients on the product labels but explicitly exempts fragrance. By taking advantage of this loophole, the cosmetics industry has kept the public in the dark about the ingredients in fragrance, even those that present potential health risks or build up in people's bodies.

Ingredients not in a product's hidden fragrance mixture must be listed on the label. As a result, manufacturers disclose some chemical constituents on ingredient lists but lump others together in the generic category of "fragrance." In fact, "fragrances" are typically mixtures of many different secret chemicals, like those uncovered in this study. On average, the 17 name-brand fragrances tested in this study contained nearly equal numbers of secret and labeled ingredients, with 14 chemicals kept secret but found through testing, and 15 disclosed on labels.

Widespread exposure and a long-standing culture of secrecy within the fragrance industry continue to put countless people at risk of contact sensitization to fragrances with poorlytested and intentionally unlabeled ingredients (Schnuch 2007).

According to EWG analysis, the fragrance industry has published safety assessments for only 34% of the unlabeled ingredients (for details of the analysis, see Methods section). The unassessed chemicals range from food additives whose safety in perfumes has not been assessed to chemicals with limited public safety data such as synthetic musk fragrances, which accumulate in the human body and may be linked to hormone disruption.

Some chemicals that are disclosed on the labels of the products in this report also raise safety concerns. They include sunscreen and ultraviolet-protector chemicals associated with hormone disruption (Schlumpf 2004) and 24 chemical sensitizers that can trigger allergic reactions (European Commission Scientific Committee on Cosmetic Products and Non-Food Products (EC) 1999).

To make matters worse, FDA lacks the authority to require manufacturers to test cosmetics for safety, including fragranced products, before they are sold to consumers. As a result, people using perfume, cologne, body spray and other scented cosmetics like lotion and aftershave are unknowingly exposed to chemicals that may increase their risk for certain health problems.

Product tests initiated by the Campaign for Safe Cosmetics and subsequent analyses, detailed in this report, reveal that widely recognized brand-name perfumes and colognes contain secret chemicals, sensitizers, potential hormone disruptors and chemicals not assessed for safety:

 Secret chemicals: Laboratory tests revealed 38 secret chemicals in 17 name-brand products, with an average of 14 secret chemicals per product. American Eagle Seventy Seven contained 24 secret chemicals, nearly twice the average found in other products tested.