

**Cosmetic Fragrance Ingredient Disclosure**

Although it's just one little word on the ingredient label, "fragrance" can contain dozens, even hundreds, of chemicals—including known carcinogens, hormone-disruptors and other toxic offenders. Fragrance manufacturers claim the formulas are confidential business information, and sometimes even keep them secret from the companies that sell their products.

The FDA requires cosmetics companies to list most ingredients on the label, but the FDA does not require the listing of specific fragrance ingredients. Without this information, it’s impossible for consumers to avoid problematic ingredients used in cosmetic products.

**Health Concerns**

*Fragrance Sensitization and Allergens*: Contact with fragrance ingredients can result in sensitization, and allergic reactions from repeated exposure. Affecting up to eleven percent of the general population, fragrance sensitization often develops into severe reactions such as contact dermatitis with continued exposures. Fragrance ingredient disclosure would help individuals with allergies or other chemical sensitivities avoid ingredients that adversely affect their health.

*Respiratory Diseases and Irritation:* Since fragrance ingredients are volatile, they easily enter the air as gases and expose the eyes and naso-respiratory tract. For people with asthma, effects may be more severe and even low concentrations of fragrance ingredients can provoke asthma attacks. Common fragrance ingredients such as benzyl salicylate, benzyl benzoate, butoxyethanol are known skin, eye, nose and throat irritants, which can cause severe symptoms such as a burning sensation, nausea, vomiting and damage to the liver and kidneys.

*Cancer:* Fragrance ingredients include chemicals listed as carcinogens by California’s Prop 65 Program and the National Toxicology Program (NTP) such as pyridine, benzophenone, methyleugenol and styrene.

*Endocrine Disruption:* A 2010 study found that 17 tested fragrances contained an average of 4 hormone-disrupting ingredients each, including synthetic musks and diethyl phthalate. Synthetic musks mimic and displace natural hormones, which can potentially disrupt important endocrine and biological processes. High levels of musk ketone and musk xylene in women’s blood may also be associated with gynecological abnormalities such as ovarian failure and infertility. Another ingredient, diethyl phthalate has been linked to unusual reproductive development in baby boys and sperm damage in adult men.

*Neurotoxicity:* The National Academy of Sciences targeted fragrance as one of the six categories of chemicals that should be given priority for neurotoxicity testing. Animal studies have linked fragrance ingredient p-cymene to headache, weakness, and irritability, along with the reduction in number and density of brain synapses. In addition, research has shown that the synthetic musks tonalide and galaxolide induce brain cell degeneration, which can lead to degenerative disorders such as Parkinson’s disease.

**Environmental Pollution**

Fragrance chemicals also represent a serious threat to the environment. Synthetic musks end up in wastewater, drinking water, soil and indoor air. Musk also bio-accumulates in the fatty tissue of aquatic wildlife, and travels through the food chain into salmon and shrimp. In a 2010 study of fragranced products, each product emitted volatile organic compounds that have been identified as toxic or hazardous under federal law. Despite releasing toxic compounds like chloromethane and methylene into the air, fragrance remains unregulated. The continual contamination of our air, soil and water resources has even identified some fragrance chemicals as persistent organic pollutants.

**Chemicals of Concern**

The International Fragrance Association (IFRA) lists 2,339 ingredients used in fragrance compounds. Of these materials the following 30 chemicals have evidence linking them to health effects including cancer, reproductive toxicity, allergies and sensitivities.

*Acetaldehyde  Benzophenone  Butylated hydroxyanisole (BHA)  Butylated hydroxytoluene (BHT)  Benzyl Salicylate  Benzyl Benzoate  Butoxyethanol  Butylphenyl methylpropional  Chloromethane (methyl chloride)  Cinnamal  Citral; Dichloromethane (methylene chloride); Diethyl phthalate (DEP); Essential Oil Mixtures  Eugenyl methyl ether (Methyleugenol)  Formaldehyde; Geraniol  Ethanolamines (MEA, DEA, TEA)  Methanol  Methylene; P-Cymene  Pyridine  Propyl paraben (Propyl p-hydroxybenzoate)  Quaternary Ammonium Compounds (e.g. benzalkonium chloride)  Resorcinol; Styrene  Synthetic Musks (Tonalide , Galaxolide, Musk Ketone, Musk Xylene)  Titanium dioxide; 1,4-Dioxane.*

**Contacts:**

Kathleen Schuler, [kschuler@conservationminnesota.org](mailto:kschuler@conservationminnesota.org), 612-767-1570

Jenna Grove, [jgrove@cleanwater.org](mailto:jgrove@cleanwater.org), 612-627-1539