

## Healthier Alternatives to Fragranced Consumer Products

Many common products contain chemicals that can harm both human and environmental health. Products with fragrances can pose health risks, yet are widely used. Recent research has discovered numerous hazardous and undisclosed chemicals in fragranced products and cleaning supplies. Fortunately, good alternatives exist that are healthier, inexpensive, and readily available.

### What kinds of fragranced products are hazardous?

*In tests, all products with a fragrance or scent contained chemicals classified as toxic or hazardous.*

*Products include*

- **laundry detergents**, fabric softeners, and dryer sheets
- **cleaning supplies** and disinfectants
- **air fresheners** and deodorizers
- **shampoos**, hair sprays, and gels
- **lotions**, moisturizers, after-shave, and sunscreens
- **soaps** and hand sanitizers
- **perfumes**, powders, and oils
- **scented candles**

### What products and practices are healthier?

- For cleaning, use “simple” products such as baking soda, white vinegar, hydrogen peroxide, unscented castile soap, and lemon juice. These products can be used individually or combined to be effective cleaners. Note: While these “simple” products can be combined with each other, they should not be combined with “regular” cleaning products (just as “regular” cleaning products should not be combined with each other).
- Choose products without any fragrance, scent, or perfume. While the base product formulation (without fragrance) may still contain hazardous chemicals, choosing fragrance-free will at least reduce potential risks and toxicity associated with fragrance chemicals.
- Avoid any kind of air freshener or deodorizer, including sprays, gels, solid disks, and oils. These products do not clean or disinfect the air, but they do add hazardous chemicals to the air we breathe. Instead of air fresheners, use better ventilation, and baking soda.

### Why are fragranced products hazardous?

- A “fragrance” in a product can contain up to several hundred chemicals, many of them hazardous even at low levels. Plus, low levels add up, and even small exposures over time can cause serious health problems.
- Fragrance chemicals include human carcinogens, endocrine disrupters, and reproductive toxicants such as 1,4-dioxane, formaldehyde, chloromethane, acetaldehyde, musks, and phthalates.
- When consumers use fragranced products, hazardous chemicals can enter and persist in the human body and the environment.

### Are “organic” or “natural” fragranced products any safer?

- No, generally not. In tests, all fragranced products emitted hazardous chemicals, even those products certified as “100% organic” or “green.”
- Products with “organic fragrance,” “natural fragrance,” or with “essential oils” contained similarly hazardous chemicals as products with regular fragrances.

### Are fragranced products harmful to health?

- Yes, potentially very harmful. Common fragrance chemicals are toxic to the neurological, respiratory, immune, and endocrine systems. Children are especially vulnerable.
- More than 30% of the U.S. population reports headaches, breathing difficulties, and other health problems from exposure to fragranced products, according to national epidemiological studies.
- Even low-level exposures to fragranced products can cause asthma attacks, anaphylaxis, rashes, seizures, migraines, breathing difficulties, loss of consciousness, and other adverse effects.

### What are the implications for the environment?

- Fragrance compounds have been found in air, soil, water bodies, and drinking water.
- Once fragrance chemicals enter the environment, they are often difficult and costly to remove.

### Are all toxic chemicals listed on labels?

- No. Manufacturers are not required to disclose toxic chemicals in fragranced products, and generally do not. Even carcinogenic “Hazardous Air Pollutants” do not need to be listed, even though no level of exposure to these chemicals is considered safe, according to the U.S. Environmental Protection Agency.
- An analysis of best-selling fragranced products found that each product emitted dozens of volatile organic compounds (VOCs), none of which were disclosed on any product label or material safety data sheet (MSDS), even though some are classified as toxic or hazardous under federal laws.

### Actual Chemicals Versus Listed Ingredients in a Popular Fragranced Laundry Product

Ingredients listed on label	biodegradable fabric softening agents (cationic)
Ingredients listed on MSDS	nonionic and cationic fabric softening agents, perfume, colorant, quality control agents
Actual chemicals (identified in analysis)	*ethanol, d-limonene, methoxy ethane, * $\alpha$ -pinene, *benzyl acetate, isocineole, $\beta$ -pinene, 2-methoxy propane, linalool, (Z)-3,4-dimethyl-3-hexen-2-one-, *chloromethane, gamma-terpinene coeluted with 2,7 dimethyl-2,7-octanediol, *acetaldehyde, 2,4-dimethyl-1,3-cyclopentanedione, 3-methyl-2-buten-1-ol acetate, $\alpha$ -terpinolene, diethoxy methane, 1,5-dimethyl-1,4-cyclohexadiene, 1-methyltricyclo[2.2.1.0(2,6)]-heptane, $\alpha$ -terpinene  *classified as toxic or hazardous under federal laws

### Where can I obtain more information?

- **Dr. Anne Steinemann** has provided her research articles and resources on her website: [www.drsteinemann.com](http://www.drsteinemann.com)