

Ethanol-- "... derived from petroleum and is **carcinogenic**... **toxic** to the skin, respiratory, cardiovascular, developmental, endocrine, neurological, and gastrointestinal systems."

Formaldehyde-- "...**toxic if inhaled**, poisonous if swallowed, skin and eye irritant, carcinogenic..."

Limonene—"...**Carcinogenic**, prevent its' contact with skin or eyes because it is an irritant and sensitizer ...always wash thoroughly after using this material and before eating or drinking...**do not inhale limonene vapor**".

Indoor air quality experts recommend *against* using chemical air fresheners and/or chemical room deodorizers of any kind.

Report adverse effects to *non-cosmetic* products to:
Consumer Products Safety Commission
1-800-638-2772
or
<https://www.cpsc.gov/incident.html>

Report adverse effects to *cosmetics* to:
Food and Drug Administration
Office of Cosmetics and Colors (HFS-100)
200 C Street, S.W.
Washington, DC 20204
1-202-401-9725

HEALTHY TIPS:

Keep your home's air smelling fresh by identifying and removing sources of bad odors.
Use natural minerals like baking soda and borax to control common odor sources like trash cans and to deodorize when you clean.
Keep windows open as much as possible to let the bad air out. Even in the most polluted cities, the outdoor air has been found to be less toxic than the indoor air
If odors are still troubling, invest in an air purifier with activated carbon filtration.
Add drops of orange, lemon, or lavender organic essential oils to organic cotton balls and put them around the house
Simmer spices like cinnamon and cloves in a little water on the stovetop.

RESOURCES:

<http://news.bbc.co.uk/1/hi/health/3752188.stm>
<http://www.alexanderlaw.com/attorney-bios.html>
<http://www.ourlittleplace.com/air.html>
<http://editorials.arrivenet.com/hea/article.php/253.html>
<http://www.deliciousorganics.com/Controversies/roomdeodorizers.htm>
<http://www.beuc.org>
<http://www.aerias.org/kview.asp?DocId=24&spaceid=2&subid=41>
<http://users.lmi.net/~wilworks/ehnlrx/a.htm#Fresheners>
<http://www.bioedonline.org/news/news.cfm?art=945>

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Let's Clear the Air about Air Fresheners and Plug-Ins



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The Global Recognition Campaign
for
Multiple Chemical Sensitivity

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Air fresheners work in one of, or in a combination of, the following four ways:

- 1) by killing your ability to smell by way of a nerve-deadening chemical
- 2) by coating your nasal passages with an undetectable oily film
- 3) by covering up one smell with another
- 4) (rarely) by breaking down the offensive odor.

Despite their name, air fresheners do little or nothing to freshen the air.

In 2002, EPA researchers testing air freshening units that plug into electrical sockets determined that when the **fragrance chemicals** in these products **react** with common indoor air pollutants they can produce **serious health hazards**. These researchers found the chemicals in plug-ins to include poisonous substances such as benzene derivatives, pinene and limonene, aldehydes, phenol, and cresol.

Pinene and limonene **react with ozone**, a common outdoor and indoor air pollutant, **creating formaldehyde** and a variety of related chemicals which have been implicated in **multiple chemical sensitivity** and **respiratory distress**.

Air freshener chemicals have been implicated in **cancer, neurological damage, reproductive and developmental disorders**, and other conditions.

The toxic chemicals in air fresheners also can aggravate **asthma** and/or trigger attacks.

Due to “**trade secret**” legislation, the **manufacturers** of these toxic products are **not required to list** all of the ingredients. In addition they are **not required to test these chemicals for safety**.

However in the [Archives of Environmental Health](#), 1997; 52:433-441, we are able to find additional listings of the **poisonous ingredients** in these products.

In May 2004, EPA’s [National Risk Management Research Laboratory](#)’s study of **plug-in air fresheners** was published in *Environmental Science and Technology*, Volume 38, No. 10, pages 2737–2745. It identified many of the **poisonous chemicals in plug-ins** and their **toxic effects**.

Later in 2004, the [European Union](#) and five of its member countries ([Belgium, France, Italy, Spain, and Portugal](#)) released results from tests they conducted on chemical air fresheners (Reference PR023/2004). Their test results, in spite of what the manufacturers would have us believe, **prove that air fresheners do not purify the ambient air. On the contrary they pollute our air by releasing well-known poisonous substances into it.**

Let’s look at some of the **toxic chemicals** in air fresheners and plug-ins:

Benzyl Alcohol — “...upper respiratory tract irritation, headaches, **nausea and vomiting**, a depressed central nervous system and a **drop in blood pressure**.”

Camphor— “On [EPA’s Hazardous Waste List](#)... readily absorbed through the body tissues...irritation of eyes, skin, nose, and throat...dizziness, confusion, nausea, twitching muscles and convulsions...**avoid inhalation of vapors**.”

Dichlorobenzene-- “**extremely toxic**, a central nervous system depressant, kidney and liver poison. One of the **chlorinated hydrocarbons** that is long-lasting in the environment and is stored in body fat. Vapor irritating to skin, eyes and throat. **Banned in California**.”

Naphthalene-- “... a **carcinogen** that accumulates in our waters and marine life. It can be irritating to the skin, alter kidney function, cause cataracts, and is **toxic** (cardiovascular and developmental), especially to children. It can be **poisonous if inhaled**, swallowed, or absorbed through the skin.

Phenol-- “...can cause skin to swell, burn, peel, and break out in hives ... cold sweats, convulsions, **circulatory collapse, coma** and **even death**.”

Pinene-- “...Flammable. Incompatible with strong oxidizing agents. Eye, skin, & respiratory irritant. May be absorbed through skin...**very destructive of mucous membranes**.”

Continued...