environment and is stored in body fat. Vapor irritating to skin, eyes and throat. **Banned in California.**

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**”.

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 ingested**, 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."

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**Report adverse effects to non-cosmetic products to:**

Consumer Products Safety Commission 1-800-638-2772 or [https://www.cpsc.gov/incident.html](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

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

This brochure is provided by: The Global Campaign for Recognition of Multiple Chemical Sensitivity [www.mcs-global.org](http://www.mcs-global.org)

Prepared by Julie Fleming MCS-Global Georgia State Coordinator
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 produce serious health hazards. These chemicals include toxic 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 synthetic chemicals in air fresheners also can aggravate asthma and/or trigger attacks.

Researching air freshener/plug-in ingredients from their Material Safety Data Sheets we find that these ingredients are toxic.

Let’s look at a few of the toxic chemicals in air fresheners/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

continued on back

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

Some of the adverse effects from exposure to the chemicals in air fresheners are:
- Irritated eyes, nose, throat
- Headache
- Anaphylaxis
- Respiratory distress
- Dizziness
- Lung irritation
- Fatigue
- Confusion
- Nausea

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.

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