

## **Hazard warning on home cleaners**

### **Study says many use chemicals linked to fertility problems**

Jane Kay, Chronicle Environment Writer  
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Dozens of common household cleaning products contain hidden toxic chemicals linked to fertility disorders in lab animals, according to data gathered by a women's research group.

A type of glycol ether is frequently found in popular cleaning products such as Windex Aerosol, Formula 409, Lemon Fresh Pine-Sol and Simple Green All Purpose Cleaner, says the report released today by Women's Voices for the Earth, a Montana-based nonprofit working to eliminate or reduce toxic chemicals in the home.

The chemical, called ethylene glycol butyl ether or EGBE, is on California's list of toxic air contaminants. Some animal studies indicate that it produces reproductive problems, such as testicular damage, reduced fertility, death of embryos and birth defects. People exposed to high levels of EGBE for several hours have reported nose and eye irritation, headaches, vomiting and a metallic taste in their mouths, studies show.

It's difficult for consumers to know whether their favorite cleaner contains the chemical because manufacturers aren't required to list it on the label. Neither the state nor the federal government regulates indoor air pollution, for instance how the cleaners might degrade air inside a home.

"These are products that women are using in their households on a daily basis, and they use them around their children," said Alexandra Gorman, the group's director of science and research and an author of the report.

The group wants to help people become aware of chemicals they might want to avoid.

Scientists say most people spend about 90 percent of their time indoors. Babies, elderly people and sick people spend almost all of their time inside.

The women's research group pored through federally mandated Material Safety Data Sheets pertaining to household cleaning products. The data sheets, which are prepared by the manufacturers and are widely available online, contain information on chemicals used in products.

The group found that EGBE, also known as 2-butoxyethanol, was a common ingredient. It's a colorless, biodegradable chemical with a fruity odor that acts as a degreaser.

The researchers found about 50 products containing varied amounts of the chemical. Some manufacturers, like Sunshine Makers Inc., which makes the Simple Green brand, didn't report how much of the chemical is used in its products.

Sunshine Makers, based in Huntington Beach (Orange County), advertises its Simply Green brand as nontoxic and environmentally friendly. In its response to the research group's study, the company said it didn't detail all the chemicals in its products to "protect its formula from piracy."

"At the same time, we back up all of our safety, health and environmental claims with independent laboratory test data, which is available to the public for the asking," the statement said.

Brian Sansoni, a spokesman for the Soap and Detergent Association, an industry trade group, responded to criticisms of the use of EGBE in household cleaners.

"There is no need to play 'Fear Factor' here. This ingredient usage in cleaning products is not known to be of concern for consumers who use these products as directed," Sansoni said.

Members of his group include Clorox Co. and S.C. Johnson, which manufacture Formula 409, Pine-Sol and Windex Aerosol -- the only Windex formulation to contain EGBE, according to the data.

The federal government removed EGBE from its list of hazardous air pollutants a few years ago, Sansoni noted.

Andrew Jacques, a spokesman for the American Chemistry Council, which represents the manufacturers of the chemical, said his group believes the several recent EPA reviews of EGBE "indicate its low toxicity to humans and the environment."

The EPA maintains a safety guideline for chronic inhalation exposure. The guideline is just that, not a regulatory limit but a guide for health officials.

Jacques also said EGBE is a key ingredient in many cleaners and helps cut the amount of volatile organic compounds in a cleaning product. Such organic compounds can cause other types of air pollution, including smog.

Some academicians and government scientists believe that there should be a reduction in toxic chemicals used in the home.

William Nazaroff, a professor of environmental engineering and chairman of the Energy and Resources Group at UC Berkeley, said the EPA erred when it removed the chemical from the hazardous air pollutants list.

Nazaroff conducted a study for the California Air Resources Board in 2006 on the indoor air chemistry of cleaning agents and toxic air contaminants.

He found that people using some common products containing EGBE could be exposed to levels 12 times greater than California's one-hour exposure guideline.

"None of these are (legally enforceable) standards for ordinary indoor environments. We have a blind spot in our regulatory structure for toxic air pollutants," Nazaroff said.

"It defies logic to think that it's unsafe to be exposed outdoors but it would be safe to be exposed at that level indoors," he said.

Generally, some of the people who have the most exposure to the chemicals are janitors and maids.

Some of those workers are represented by the Service Employees International Union. Ahmad Abozayd, vice president of SEIU's Local 87 in San Francisco, said there have been oral agreements with companies to use nontoxic products.

In the Bay Area, about 30 million square feet of office space is cleaned with products deemed "environmentally preferable," said Angela Gustafson, senior vice president for OneSource Building Services Inc., a national

cleaning company.

The bulk of the chemicals have been certified by an independent group called Green Seal, she said.

"It's absolutely a trend. It's not just for the cleaners of the buildings but for the people who work in the buildings."

In the old days, "people thought it was a good thing to see blue water in the toilet and smell the bleach smell. But if there's so much chemical and caustic in the bathroom, that's harmful."

State officials are also looking at the chemicals.

The state Department of Toxic Substances Control has launched a Green Chemistry Initiative to get away from old-style toxic products. The initiative's purpose is to protect public health and the environment through the design of less-toxic products.

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Online resources

Read the report:

[www.womenandenvironment.org](http://www.womenandenvironment.org)

California Green Chemistry Initiative:

[links.sfgate.com/ZLW](http://links.sfgate.com/ZLW)

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Clean with safer products

Check labels and pick cleaners that contain green alcohol instead of other solvents.

Choose fragrance-free items and don't pick antibacterial soaps that unnecessarily rely on chemicals.

Pick detergents based on plant oils rather than petroleum, and plant-oil disinfectants such as eucalyptus, rosemary or sage.

Mix your own cleaners using items such as plain soap, water, baking soda, vinegar or lemon juice.

For more tips, go to [links.sfgate.com/ZLX](http://links.sfgate.com/ZLX)

Source: The Green Guide

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The household products list

Cleaning products reported to contain 2-butoxyethanol

All-purpose cleaners

America's Home Value AllPurpose Cleaner

Aroma Clean by Simple Green

Clean Swipe Spray Cleaner

Crystal Simple Green Cleaner/ Degreaser

Formula 409 All Purpose Cleaner Grease & Grime

Formula 409 All Purpose Cleaner Lemon Fresh

Formula 409 All Purpose Cleaner Lemon Fresh Antibacterial

Formula 409 All Purpose Cleaner Degreaser (trigger spray)

Formula 409 Spray All Purpose Cleaner

Formula 409 Daily Kitchen Cleaner

Lemon Fresh Pine-Sol Cleaner & Antibacterial Spray

Pro Formula 409 Degreaser

Savogran Dirtex Spray Cleaner

Simple Green All Purpose Cleaner Lemon Scented

Simple Green All Purpose Cleaner Foam

Simple Green BBQ Grill Microwave Cleaner

Simple Green Concentrated Cleaner, Degreaser, Deodorizer

Simple Green Extreme Clean

Simple Green Multi-Purpose Cleaner

SOS All Purpose Cleaner Lemon Scent

Whistle All Purpose Cleaner

Bathroom Cleaners

America's Home Value Bathroom Cleaner

Aqua Mix Heavy Duty Tile and Grout Cleaner

Magic American Marble & Granite Magic Tile & Grout Magic Cleaner

Carpet/Rug Cleaners

Aroma Clean by Simple Green Carpet, Fabric and Upholstery Cleaner

**Carpet Stain Remover**

**It's Magic Carpet Cleaner**

**Simple Green Carpet Cleaner**

**Spot Shot Instant Carpet Stain Remover, aerosol and trigger sprays**

**Spot Shot Large Area Multi-Purpose Cleaner**

**Floor Cleaners**

**Fresh Scent Pine-Sol Spray & Mop Floor Cleaner**

**Lemon Fresh Pine-Sol Quick Floor Cleaner**

**Aroma Clean by Simple Green Floor Cleaner**

**Break Up Floor Stripper**

**Glass Cleaners**

**America's Home Value Glass Cleaner**

**Easy Off Glass Cleaner**

**Lemonized with Ammonia**

**Formula 409 Glass & Surface Cleaner**

**Glass Plus Mirror & Glass Cleaner**

**Sparkle Glass Cleaner**

**Windex Aerosol Wipes**

**Aroma Clean by Simple Green All Purpose Cleaner Wipes**

**Formula 409 Cleaning Wipes**

**Simple Green All Purpose Towelettes**

**Simple Green Lemon Scented All Purpose Wipes**

**Simple Green Safety Towels**

**Source: Manufacturers and Women's Voices for the Earth**

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<http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/07/24/MNG0QR5P191.DTL>

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