

How Housing Matters

Fewer Hazardous Products
Mean a Healthier Home

Virginia Cooperative Extension



Household Hazardous Products

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Household hazardous products are common cleaning products used in the kitchen, bathroom, bedroom, living room, and garage and for lawn or car care. Examples include bleach, spray cleaners, bathroom cleaners, household pesticides, and glues.

Look for these **SIGNAL** words to determine how hazardous a substance is.

Category	If the label has this signal word (required on label) you know how toxic the product is (estimated amount needed to kill an average person):
I Highly toxic	DANGER POISON	A few drops - 1 teaspoon
II Moderately toxic	WARNING	1 teaspoon - 1 ounce
III Slightly toxic	CAUTION	More than 1 ounce
IV Not toxic	Not required	N/A

What Is a Hazardous Substance?

Hazardous substances are anything that is toxic, corrosive, flammable, combustible, an irritant, or a strong sensitizer. They can cause serious personal injury or illness when used the wrong way and are very dangerous when swallowed.

What Is the Most Common Hazardous Substance?

The most common hazardous substance is a volatile organic compound, or VOC. "Volatile" means it gets into the air easily during use or as it ages. "Organic" means any carbon-based compound.

VOCs are used in household cleaning products. They have a strong smell and are easily evaporated, toxic, potentially harmful, and flammable. They must be used carefully, especially around children.

Why Is It Important to Know About VOCs?

- VOCs can have serious health effects when not used carefully.
- VOCs are “sensitizers” — chemicals that may lead to allergic or other serious reactions after many uses.
- Side effects of VOC use can include irritation, drowsiness, headache, nausea, and depression of the nervous system; VOCs can be carcinogens (cause cancer).

What Do You Need to Know When Using Hazardous Household Products?

- Pick the lowest VOC products available and buy only what you need.
- When using these products, increase the ventilation by opening windows and doors. When you can, use products outside. Dispose of VOCs correctly; never put chemicals down the drain. Ask your town, city, or county when and where they collect hazardous waste.
- When storing products, close bottles tightly. Store them away from food and eating areas. Keep them out of reach of children and pets and in cool areas of your house.
- Keep products in their original package. Read the label. By keeping the product and label together, you will know how to use and dispose of the product. You will also have a list of the ingredients. Never mix products.

How Do You Get Rid of Leftover Products?

- When trying to dispose of leftover products, share them with others.
- Check Earth911.com, an environmental services company that explains how to dispose of products. You can find nearby places that will take products.
- Never burn leftover products!



What Are Precautions to Take to Protect You and Your Family?

- Know potential safety hazards and precautions.
- Post the Poison Control Center phone number: 1-800-222-1222.
- Be aware of the ingredients. It is very important to know what ingredients are in a product so you can protect yourself from any dangers. If the label does not give the ingredients or directions to safely use the product, consider buying another product that lists this basic information. You can also go online or call the manufacturer and ask for a MSDS (Material Safety Data Sheet) that provides directions for using a particular substance.

Where Can I Go to Learn More?

- Oxford University MSDS database: <http://msds.chem.ox.ac.uk/#MSDS>
- ILPI MSDS glossary: www.ilpi.com/msds/ref/index.html
- EPA: www.epa.gov/iaq/voc.html

You can also limit hazardous products by testing other homemade products.* Mix your own household cleaners made from baking soda, vinegar, borax, olive oil, lemon juice, and other products. The following links provide “recipes” for these homemade cleaners:

- Maryland Cooperative Extension:
<http://extension.umd.edu/publications/pdfs/hw1.pdf>
- University of Missouri Extension:
<http://extension.missouri.edu/p/WM6003>
- StopWaste.Org:
<http://stopwaste.org/home/index.asp?page=585#Instead>

NOTE: Homemade cleaners are not necessarily safe for all surfaces and may be less effective than commercial cleaners.

***NEVER** mix bleach and ammonia when making your own cleaner.

Resources

www.aces.edu/pubs/docs/H/HE-0923/HE-0923.pdf

www.aces.edu/pubs/docs/H/HE-0883/HE-0883.pdf

www.ext.vt.edu