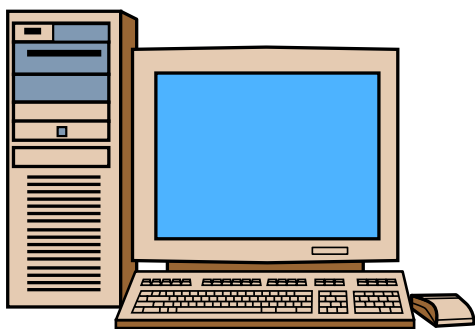


Researching Household Products

Using the Internet and Other Resources to Uncover Health Effects and Environmental Impacts, and Find Alternatives

To assess the potential hazards of household products, including pesticides, you need to do two main things. First, read the product's label for warnings and to discover some or all of the ingredients. Next, you may have to do some deeper research into the product itself and the individual chemical ingredients.



The Internet has become an efficient and easy way to get information on chemicals, but always be certain the source is reputable (see sidebar “Judging Reputable Websites” for more on this).

There are also many good books and other printed materials that can help explain possible hazards and offer safer alternatives.

Product Labels

Pesticides, including herbicides, insecticides, rodenticides, fungicides, and bactericides (disinfectants), are registered by the U.S. Environmental Protection Agency. Their labels include an EPA registration number, list of active ingredients, precautionary statements, specific health hazards, first aid information for physicians or emergency personnel, some environmental hazards, storage and disposal instructions, and detailed information about how to use the product. All pesticide labels

must include one of the following precautionary statements: CAUTION, WARNING, or DANGER. Called signal words, they indicate the short-term (acute) toxicity of a product, with DANGER being the most toxic and CAUTION least toxic. In addition to the active ingredients, almost all pesticides contain what are called “inert” ingredients. See the sidebar below for more information on “inert” ingredients.

Foods, drugs, cosmetics, and personal-care products are regulated by the Food and Drug Administration. The FDA requires that products under their jurisdiction list all ingredients, in decreasing order of amount. Labels for many of these products will contain signal words, but the FDA does not have a hierarchy of signal words with different meanings. Signal words are merely general alerts that some hazard exists.

Products not regulated by the EPA or FDA fall under the jurisdiction of the Consumer Product

“Inert” Ingredients in Pesticides

The amount of “inert” ingredients in a pesticide product may be far greater than the active ingredient(s). Inert ingredients are defined as those ingredients which perform any other function in the product besides killing the target pest. For example, inert ingredients include solvents, detergents, and propellants.

The term “inert” is highly misleading because it may convey the impression that these ingredients are not toxic or otherwise hazardous. In fact, some inert ingredients are more toxic than the active ingredient(s). Others are highly flammable or damaging to the Earth's ozone layer. The most important thing to realize about inert ingredients is that their chemical identity is almost always withheld from you the consumer. Only a few of the most toxic inerts must be listed. In other words, the higher the percentage of inert ingredients in a product, the higher the percentage of unknown ingredients.



Safety Commission (CPSC). These products include cleaners, non-chlorine bleach (chlorine bleach is regulated by the EPA because it is a disinfectant and therefore a pesticide), paints and wood finishes, and other household items. CPSC labels include signal words, with DANGER meaning extremely hazardous and WARNING or CAUTION meaning less hazardous. Next to the signal word are phrases which identify the nature of the hazard

indicated by the signal word. Some chronic health hazards may be included. If a product is hazardous, the label must list the ingredients that contribute to that hazard. Not all ingredients are required to be listed and percentages are usually not given. If a product is considered non-hazardous, no signal words are required.

Identifying Other Ingredients

You should first obtain a Material Safety Data Sheet (MSDS) for the product you are researching. Many companies post MSDSs on their websites, and there are numerous sites that are libraries of thousands of MSDSs (see below). Contact the manufacturer if you can't find the MSDS on the Internet. An MSDS will often list ingredients that are not listed on the product label, along with more detailed information on hazards.

You can use the site "Where to find Material Safety Data Sheets on the Internet" at <http://www.ilpi.com/msds/index.html> to locate MSDSs or to find out more about how to interpret them. The site has detailed information on the laws that require MSDSs, what information they are required to include, examples of MSDSs, and more. The site also links to numerous Internet sites where MSDSs can be found.

One of the easiest-to-use sites that can help

you find an MSDS is the Vermont SIRI (Safety Information Resources, Inc.) website at <http://hazard.com/msds/index.php>. The site also includes information on how to read an MSDS, and toxicology information on specific chemicals.

Chemical Names

Many chemical ingredients have multiple names. Scientists and agencies do not always use the same name for the same chemical. The common name is used as a keyword in most, but not all, sources of information on chemicals and is the one you should use first in your search. Look for the Chemical Abstract Service's (CAS) number (also known as the CAS#, CAS Reg. No. or CASRN). The CAS number is the standard way of identifying a particular chemical. Many Internet sources of information on chemicals allow you to search for a chemical by its CAS number. Chemfinder is a useful source of synonyms for a chemical name (<http://www.chemfinder.com>).

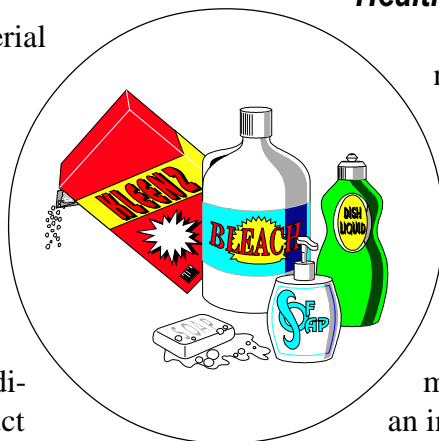
Health and Environmental Effects

Once you know the common name or CAS number for one or more of the ingredients in the product you are researching, you can consult several sources to gather information on human and environmental health effects. It is important to keep in mind that often the health-hazard information you find when researching an individual ingredient will be based on tests done with much higher concentrations of the chemical than is found in the product in question, and on rodents or other animals rather than on humans. So while the hazard may still be present, it could be lower than the individual chemical's data indicates.

Search the National Library of Medicine's Toxnet site (click on "HSDB" for the Hazardous Substances Databank).

<http://toxnet.nlm.nih.gov>

Search the National Toxicology Program's



website (use the site's search feature or click on "Chemical Health & Safety Information").

<http://ntp-server.niehs.nih.gov>

You may also want to browse through the New Jersey Department of Health's Hazardous Substances Fact Sheets to find out if any of the chemicals you are researching are listed (most web browsers have a "find" command that will let you search a website page for a keyword).

<http://www.state.nj.us/health/eoh/rtkweb/rtkhsfs.htm>

If any of the chemicals you are researching are released to the environment by industries, check the Environmental Defense Fund's Scorecard site. Scroll to the bottom of the page and search within the site's "About the Chemicals" section found through a drop-down menu.

<http://www.scorecard.org>

For information on pesticides and their active ingredients, go to the Pesticide Action Network's database.

<http://www.pesticideinfo.org>

Digging Deeper

To locate additional sources of information on chemicals, a good source is the National Pesticide Telecommunications Network website. They have links to sites that provide toxicology and active-ingredient fact sheets, health information databases, environmental and chemical properties databases, and product label and MSDS databases. Some of these sources focus solely on pesticides but most of them provide information on all chemicals.

<http://ace.orst.edu/info/nptn/tech.htm>

If you are still not finding the information you are seeking, you may want to conduct a general Internet search for the product or chemical ingredient names. Choose your favorite search engine (such as Google) and type in several search terms. If all of your attempts fail to bring you the information that you need, consider choosing an alternate product or searching for a homemade formula that you can prepare yourself.

Getting on the Internet

Most public libraries provide free Internet access. If you are not familiar with using computers or the Internet, library personnel are available for assistance. If you choose not to research using the web, you can talk with library staff to find out what written resources are available to you or check the list below.

Judging Reputable Websites

Many of the Internet's best websites for chemical and health-hazard information will be those of government agencies (".gov") or universities (".edu"). (For a good article on distinguishing credible information from garbage on the Internet see "Get Smart About Web Site I.Q." at <http://searchenginewatch.com/searchday/02/sd0404-webiq.html>. While not specifically about information on chemicals, this article can help you sort out and judge the sources of the massive amount of information on the Internet.)

Alternatives to Hazardous Products

Safer alternatives are likely to exist for many products. One good place to start searching for alternatives is on the Washington Toxics Coalition website at <http://www.watoxics.org>. On our "Publications" page you will find many fact sheets covering a wide range of topics. You will find information on the control of indoor and outdoor household pests (including weeds), cleaning products, paints, solvents, and wood preservatives, art and hobby supplies, and more.

You can also contact the Washington Toxics Coalition by email (info@watoxics.org) or phone (800-844-SAFE) to order fact sheets or other publications or to request more-detailed fact packets on a number of topics.

Another good website to consult is the Northwest Coalition for Alternatives to Pesticides at <http://www.pesticide.org>. Their fact sheets cover indoor and outdoor pest-solution topics as well as information on specific pesticide active ingredients.

If the product you are researching is a **clean-**

ing product, there are recipes based on simple household ingredients such as baking soda, vinegar, and liquid soap that will do the job just as well, and be safer to your health and the health of the environment. To find out more about less-toxic cleaning, pick up a copy of one of the books listed below, or email or call the Washington Toxics Coalition to request a copy of our Home Safe Home fact sheet entitled “Safer Cleaning Products.” Our Home Safe Home fact sheets are available for \$1.50 plus Washington State tax and \$0.50 shipping and handling. An abridged version can also be found on our website at <http://www.watoxics.org>.

Resources for Ingredient Research and Safer Cleaning and Home Maintenance

Berthold-Bond, Annie. *Better Basics for the Home: Simple Solutions for Less Toxic Living*. Three Rivers Press. New York. 1999.

868 Practical Formulas for All Purpose Cleaners, Body Creams and Lotions, Laundry Products, Disinfectants, Baby Care, Fragrances, Hair Care, Natural Facials, Lawn and Garden Care, Natural Insect Repellants, Milk Paint, Plant Stains and Dyes, Art Supplies, Hobbies, and Kids’ Projects.

Berthold-Bond, Annie. *Clean and Green: The Complete Guide to Nontoxic and Environmentally Sound Housekeeping*. Ceres Press. Woodstock, NY. 1990.

485 ways to clean, polish, disinfect, deodorize, launder, remove stains — even wax your car without harming yourself or the environment.

Dickey, Philip. *Grow Smart, Grow Safe: A Consumer Guide to Lawn and Garden Products*. Washington Toxics Coalition and Local Hazardous Waste Management Program in King County. Seattle, Washington. 2002.

This book reviews 450 pest controls and fertilizer products, and lists where to buy least-hazardous products.

Gosselin, Robert, et. al. *Clinical Toxicology of Commercial Products*. Williams & Wilkins. Fifth edition, 1984.

Although an updated edition is not planned, this 2000-page tome is still an invaluable reference for technical information on chemicals, ingredients, and complete products. Check a university library or your public library reference desk for a copy.

Steinman, David and Samuel S. Epstein, M.D. *The Safe Shoppers Bible: A Consumer Guide to Nontoxic Household Products, Cosmetics, and Food*. Macmillan. New York. 1995.

Consumer products rated based on their acute health hazards including flammability, causticity, irritants, presence of allergens or strong sensitizers; and chronic health effects including presence of carcinogens, neurotoxins, or reproductive toxins. The book also gives selected products an overall recommendation.

Winter, Ruth. *A Consumer’s Dictionary of Cosmetic Ingredients*. Fifth edition. Three Rivers Press. 1999.

This book is useful because few other books include so many semi-obscure ingredients that can be present in men’s and women’s cosmetics.

The Environmental Home Center. This store in Seattle offers a comprehensive selection of green home improvement and building materials such as paints, natural carpets, and safer cleaning products.

<http://www.environmentalhomecenter.com>

The Green Guide. This online resource features articles on many categories of household products, including carpets, pest-control products, food, and cleaning products. (Some items only available to paid subscribers.)

<http://www.thegreenguide.com>

Due to the fact that the Internet and individual websites are constantly changing and being updated, we cannot guarantee the accuracy of website addresses and other site-specific details in this fact sheet. All information is correct to the best of our knowledge as of publication date. If you wish to notify us of corrections, please email to info@watoxics.org.

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