

Smart Words for Smart Homeowners

THE EXPERIENCE OF EXPERTS AND THEIR ADVICE ON RELEVANT HOMEOWNER TOPICS

Cleaning Agents You Should Try To Avoid

Toxic

The atmosphere in our homes are brimming with the miasma from petrochemical solvents added to cleaners to dissolve dirt and oils. A number of harmful toxins can be found in your garage, your backyard, under your sinks and right inside your utility closets with your mops and dust rags. This essay identifies the names and demystifies some of the health hazards of these old and new household "helpers."

A typical household audit will uncover 3 to 25 gallons of toxic materials. You'll discover most in common cleaning agents. The interesting thing is that no law requires manufacturers of consumer or industrial cleaning products to list any ingredients on their labels. No law requires manufacturers to test their wonder products for air safety either. Its up to you to make sure your home is not only clean but also noxious, deadly, dangerous, harmful and nontoxic. You are the final – maybe only – responsible person on the long freeway of importing, production and distribution.

Unfortunately, it isn't easy to identify which products contain these hazardous ingredients. While cleaners are the only household products regulated by the U.S. Consumer Product Safety Commission under the Federal Hazardous Substances Labeling Act, their sellers aren't required to reveal these products ingredients. These ingredients are considered trade secrets, so government regulations are designed to protect this proprietary corporate information, not to protect human health or the environment of the citizens. There is no compromise in sight. Your bought and paid for congress is hard at work for you. This, after all, is the home of the brave.

When it comes to polishes and cleaners, the consumer has little to go on beyond the warning labels that manufacturers are required to put on their products. The labels DANGER, WARNING and POISON give only a very general idea about the seriousness of the unknown

substances a consumer product contains. In fact, a New York Poison Control Center study found that 85 percent of product warning labels are inadequate.

These warnings apply only to a products immediate health effects; they don't illuminate what happens when we use them over a long period of time. If you're using common household cleaning products, you're likely to encounter the following chemicals (among many others) and the following effects, while cleaning:

- * Chlorinated phenols found in toilet bowl cleaners are toxic to respiratory and circulatory systems.
- * Diethylene glycol found in window cleaners depresses the nervous system.
- * Phenols found in disinfectants are toxic to respiratory and circulatory systems.
- * Nonylphenol ethoxylate, a common surfactant (detergent) found in laundry detergents and all-purpose cleaners, is banned in Europe; it has been shown to biodegrade slowly into even more toxic compounds.
- * Formaldehyde found in spray and wick deodorizers is a respiratory irritant and suspected carcinogen.
- * Petroleum solvents in floor cleaners damage mucous membranes.
- * Perchloroethylene, a spot remover, causes liver and kidney damage.
- * Butyl cellosolve, common in all-purpose, window and other types of cleaners, damages bone marrow, the nervous system, kidneys and the liver. The list could fill a book. And its a book that would include thousands of other chemicals some so dangerous that they're found on lists of chemicals associated with Superfund toxic waste sites and in the toxins section of the U.S. Clean Air and Water Acts.

Hints

To detoxify your mop closet, first rid it of cleaners that are toxic or that you suspect may be toxic. You can be sure of this if the label says "WARNING", "DANGER" or "POISON".

If you're like most people, you've probably got more than a few rusty, crusty, almost-empty bottles of garden stuff or cleaning products, along with some dried-out sponges and a furniture-polish-soaked T-shirt hanging around in your mop closet. With a little organization and attention to labels, you can transform it into a complete and efficient collection of "almost green" or green cleaners and other products that will not only help keep your house spic-and-span, but also help reduce dangerous indoor air pollution created by most conventional household cleaners.

Some cleaners may advertise that they are environmentally sound but fail to provide a full list of ingredients. The manufacturer that gives you the most information about its product is usually the manufacturer you can trust.

Start by pulling everything out and making three piles: 1 - for the things you use every week (laundry detergent, toilet paper, trash bags, paper towels), 2 - for things you use every once in a while (window cleaner, hardwood floor cleaner, stain and odor removers) and 3 - for things you can't remember using and things that look caked on, rusted over or petrified beyond recognition.

Pile #1 Use Often	Pile #2 Occasional Use	Pile #3 Toxic Or Hazardous
Store Within Reach	Store Away From Immediate Grasp	Dispose At A Public Works Location

Take a close look at the labels on the products in piles 1 and 2. Anything that you know to be toxic, move to pile 3. The items in pile 1 go back into the closet. Store products you only use now and then (pile 2) on an out-of-the-way shelf in the closet. And items in pile 3 get banished from the house forever but do not dispose of them down the drain or in the garbage; your local department of public works can tell you how to safely dispose of these hazardous household wastes. After this exercise, you might find that you need to do some restocking to meet your cleaning needs with safe and natural products.

Buying New

When you buy new cleaning products, look for those that list their ingredients on the label and make sure those ingredients include no petroleum-based surfactants, chlorine or phosphates. Also look for the words nontoxic and biodegradable. A host of products now available in natural food stores and in many supermarkets are designed to clean as effectively as their

petrochemical counterparts, but won't pollute your home or the earth in the process.



You will discover, sadly, that not all natural Low VOC, green, natural, nontoxic, plant friendly and biodegradable products will work as well as the items you're replacing.

Sponges

Sponges by nature are perfect breeding grounds for germs, since they are a moist, warm habitat and come into close and frequent contact with bacteria when wiping up spills, meat juices, etc. However, the disinfectants used in these sponges may help contribute to the evolution of drug resistant super germs. Its easy to keep a pure cellulose sponge germ free by boiling it in a pot of water for three to five minutes, tossing it in the top rack of the dishwasher, or microwaving it on high for one minute. Pure cellulose sponges can be found in natural-food stores and hardware stores.

If you use sponges to clean any part of your home, make sure they're pure cellulose sponges that are not treated with a synthetic disinfectant. Most sponges sold in U.S. supermarkets these days are impregnated with triclosan or other synthetic disinfectants. Packaging that claims "kills odors" or "resists odors" makes these sponges easy to distinguish. In reality, a disinfectant-laden sponge is ineffective at sterilizing countertops or other surfaces; the disinfectant simply gives you a germ-free sponge. This, in and of itself, is not a bad thing but don't take it as a cure all.

OLD PRODUCTS THAT ARE HIGHLY TOXIC

From Lysol to Liquid-Plumr to steel-wool scrubbing pads, The Daily Beast ranks the most dangerous products that might be lurking under your sink. A health score is presented in whole numbers on a scale of 0 to 10. 10 will be the least toxic. 1 is VERY BAD.

De-toxification has become a growing trend. Whether detoxing your body with juice fasts, eschewing BPAs, or choosing only organic products from beauty supplies to food and clothing more people than ever are concerned about what's going into our homes and bodies. Despite the renewed attention, plenty of toxins remain in products we use every day, especially common household cleaning products, which can have dire health effects.

To compile a list of the most toxic cleaning products, we turned to the experts at Good Guide, a leading authority on consumer-product assessment based on health, green-consciousness and social responsibility. Each product was ranked based on its health rating, but ties were broken according to its overall score that also includes scores for societal and environmental impact. This is a small sample.

RISKY, RETRO REMEDIES

Hailed in their day as miracle remedies meant to rid your house of pests or make a household task easier, many famous products have since been found to be highly toxic, carcinogenic, or just plain deadly. The Environmental Protection Agency (EPA) has banned many of them as hazardous to humans and the environment. But if you inherited a house full of a previous owner's junk or if your garage, shed, or basement hasn't been cleaned out in years some of those lethal pesticides, poisons and cleaners might still be lining the shelves.

Now's the time to do an inventory and safely dispose of these items to be sure nothing that could threaten your family or pets is still lingering. To help you know what to look for, here's our list of killers masquerading as household helpers. If you find any of these chemicals, contact the hazardous waste collection agency in your town, city or state to learn how to handle them and make sure you don't harm yourself or the environment in trying to get rid of them.

Strychnine & Rodenticides

Strychnine might be the most famous name on this list; rumored, fictional, or documented cases of death by strychnine poisoning include Alexander the Great, blues legend Robert Johnson and two characters from Psycho. And it's not an easy way to go, either. Ingesting this rodenticide has several gruesome stages. First, severe nausea and vomiting can occur; next, convulsions begin, lasting longer and occurring more frequently as the chemical courses through your system. If you survive the violent seizures, you'll end up in a rigor-mortis-like muscle lockdown, leading to death by asphyxiation.

Lye (Sodium Hydroxide) - Drain Cleaners

This highly caustic alkaline chemical cures fish and olives, straightens hair and bleaches wood faster than

you can say "Ow! That stuff really burns!" But unless your house's previous owner had a taste for Scandinavian lutefisk, lye would probably be lying around for one reason: drain cleaning. While the chemical is legal, it's still as dangerous as ever especially if moisture hits the dry, granulated version. Inhaling lye fumes can cause your throat to swell, inflame your lungs and also affect your esophagus. It can also burn skin on contact or blind you if it gets in your eyes; if ingested, it can eat holes in the digestive tract and even induce a coma.

Perfluorooctane Sulfonate (PFOS).

Old formulations of Scotchgard. This miracle product was developed in the early 1950s, when a 3M scientist spilled some synthetic latex onto her white tennis shoes and found that it prevented further staining. PFOS became the darling of the upholstery and carpet industries for decades. Fabrics and carpets were impregnated with it at the plant and clean-freak homeowners could buy the stuff in spray-on form in a can. In 2000, however, 3M announced it would phase out PFOS production because tests showed the chemical had a strong tendency to accumulate in human tissue and could pose a health risk. Health activists suspect that PFOS causes cancer and liver damage and increases the risk of high cholesterol, thyroid-related health problems and the likelihood of attention deficit hyperactivity disorder (ADHD) in children, though the Centers for Disease Control has not yet found a link to these issues. Nevertheless, the company has since brought a non-PFOS version of its product back on the market, one with a chemical half-life of weeks instead of years.

DDT-based Pesticides

Concerned that the worldwide use of DDT [Dichloro-diphenyl-trichloroethane] in agriculture, home gardens and infectious-disease prevention without much research into the effects of the chemical was the real cause of mass bird deaths, American biologist Rachel Carson wrote *Silent Spring* in 1962. The seminal book set off investigations that led to a 1972 ban on the chemical, which is suspected of being a carcinogen and is known to have adverse effects on pregnancy and growth. Forty years later DDT may seem like a long-lost product, but finding some of the old pesticide in your garden shed isn't totally out of the realm of possibility: as late as 2006, one homeowner brought a 50-pound bag of the pesticide to cleanup authorities.



Diazinon & Diazinon Pesticides

Diazinon is a lethal way to take out cockroaches, ants and fleas; it inhibits the enzymes necessary for proper functioning of the nervous system and it works the same way on humans. Weakness, headaches, tightness in the chest, sweating, nausea, vomiting and slurred speech are only a few of the symptoms of diazinon exposure. The pesticide was most popular in the 1970s and 1980s for use in home gardens but was outlawed in 2004 for residential use though it's still legal to use products containing diazinon bought before the 2004 ban.

Chlorpyrifos & Dursban

Chlorpyrifos, commonly sold under the trade name Dursban, was until recently one of the most widely used pesticides in the United States. The loose form of this organophosphate insecticide, which is related to nerve gas, was pulled from the residential market in 2000 after it was linked to asthma and reproductive problems, among other issues. (It's still used in contained bait traps.) Chlorpyrifos can send the nervous system into overdrive, leading to nausea, dizziness, confusion, and, at high exposures, respiratory paralysis and death. Though it is no longer sold to consumers, Dursban and its ilk are still allowed for commercial agricultural use in the U.S. and are sold overseas.

Creosote, Coal-tar Creosote, Coal-tar Pitch

Coal-tar creosote is a greasy black liquid used as a wood preservative. Before the advent of pressure-treated wood, it was available from hardware stores for consumers looking to weather-seal their fences and mailbox posts. Both the International Agency for Research on Cancer and the EPA have determined that the coal-tar version of creosote is a carcinogen. Eating food or drinking water contaminated with it can cause burning in the mouth and throat and stomach pains; contact can cause rashes, chemical burns on the eyes, convulsions, kidney or liver problems and death. And take note: Even if you don't have a can of the stuff lurking in the basement, it might be coating the old railroad ties the previous owner used to build a raised vegetable garden.

Lead & Lead Paint

The federal government banned the sale of lead paint in 1978 because it can cause kidney and reproductive problems in adults and, worse, physical and mental developmental issues in children. After more than three decades, it's likely that the half-used can you found in the garage has dried out. But if you unearth an untouched gallon sitting on a back shelf, resist the urge to use it, even for a small project. More important, find out how to dispose of it properly in your municipality; don't just throw it away. And if you realize the same shade of blue on the can is the one in that now-peeling kids' bedroom, buy a lead-testing kit and look up the number of a certified abatement specialist. Contractors doing painting or remodeling are now required by federal law to get training in preventing lead contamination and must follow strict demolition and disposal guidelines, so getting rid of the stuff in places where the dust can get to children is a job best left to the pros.

About Low VOC & No VOC Paints

We have been using Low Odor, Low VOC and NO VOC paints for a few years. The fact is that what most brands sell will fall into the polite category of Crap. Generally, they take more coats to cover well, have less durability, have less adhesion and there may be an issue of color sustainability; fading. On the other hand, we have had high satisfaction, on all counts, with the offerings of one high quality brand. That means you use less - fewer coats - to get better coverage, that lasts longer and looks better longer. There's no substitute for great quality. Call me for that name.



It is hard to believe that a small label like this and some truthful ingredient wording could harm an industry. Write to your congressman or congresswoman today. And remember, they - CONGRESS- takes millions from this industry. So unless you scream, your voice will be suppressed by the very loud sounds of money.

Product	Good Guide Health Rating	Maker	Notes
Liquid-Plumr Clog Remover	3	The Clorox Company	Potentially harmful ingredient: Sodium hydroxide (low level of concern). Associated dangers: Suspected of causing respiratory, skin and sense-organ toxicity.
Tuff Stuff Foam Cleaner	3	Armored Auto Group	Potentially harmful ingredient: Coconut diethanolamide (medium level of concern), sodium nitrate (medium level of concern). Associated dangers: Suspected of causing cancer, immunotoxicity, developmental toxicity, cardiovascular or blood toxicity.
Glass Plus Glass & Multi-Surface Cleaner	3	Reckitt Benckiser	Potentially harmful ingredient: 2-propanol (below threshold level for concern), propylene glycol mono-methyl ether (medium level of concern), propylene glycol (medium level of concern). Associated dangers: Suspected of causing reproductive toxicity, immunotoxicity, respiratory toxicity and gastrointestinal or liver toxicity
Lysol Cling Toilet Bowl Cleaner	3	Reckitt Benckiser	Potentially harmful ingredient: Oxalic acid (medium level of concern), ethyl alcohol (medium level of concern), sodium hydroxide (low level of concern), glyoxal (low level of concern). Associated dangers: Suspected of causing reproductive toxicity, neurotoxicity, cancer, developmental toxicity, immunotoxicity
Lysol Action Gel	3	Reckitt Benckiser	Potentially harmful ingredient: Oxalic acid (medium level of concern), ethyl alcohol (medium level of concern), sodium hydroxide (low level of concern), n-alkyl dimethyl benzyl ammonium chlorides (low level of concern), glyoxal (low level of concern). Associated dangers: Suspected of causing reproductive toxicity, neurotoxicity, respiratory toxicity, asthma, cancer, developmental toxicity
Legacy Of Clean Bathroom Cleaner, Spray	3	Amway	Potentially harmful ingredient: Propylene glycol mono-methyl ether (medium level of concern), triethanolamine (medium level of concern), sodium lauryl sulfate (below threshold level for concern). Associated dangers: Suspected of causing reproductive toxicity, gastrointestinal or liver toxicity, immunotoxicity, respiratory toxicity
Legacy Of Clean Soft Cleanser	3	Amway	Potentially harmful ingredient: Propylene glycol (medium level of concern), coconut diethanolamide (medium level of concern). Associated dangers: Suspected of causing respiratory toxicity, immunotoxicity, cancer.
Lysol IC Disinfectant Spray	2	Reckitt Benckiser	Potentially harmful ingredient: Ethyl alcohol (medium level of concern), carbon dioxide (medium level of concern), triethanolamine (medium level of concern). Associated dangers: Suspected of causing cancer, developmental toxicity, reproductive toxicity, respiratory toxicity
Resolve Triple-Action Spray	1	Reckitt Benckiser	Potentially harmful ingredient: Acrylic acid (high level of concern), butylated hydroxytoluene (medium level of concern), methacrylic acid (low level of concern). Associated dangers: Suspected of causing immunotoxicity, respiratory toxicity.
Bowl Fresh Toilet Bowl Deodorizer	1	Willert Home Products	Potentially harmful ingredient: Para-dichlorobenzene (high level of concern). Associated dangers: Authoritatively recognized to cause cancer, suspected of causing developmental toxicity
Rite Aid Automatic Toilet Bowl Cleaner With Bleach	1	Rite Aid Corporation	Potentially harmful ingredient: Bromine (high level of concern). Associated dangers: Suspected of causing endocrine-disrupting effects, gastrointestinal or liver toxicity
Bissell Tough Stain Pre Cleaner	1	Bissell	Potentially harmful ingredient: Ethylene oxide (high level of concern). Associated dangers.
Bissell 2X Natural Orange Formula	1	Bissell	Potentially harmful ingredient: Ethylene oxide (high level of concern), propylene glycol (medium level of concern). Associated dangers: Authoritatively recognized to cause cancer, authoritatively classified as neurotoxic to humans, suspected of causing immunotoxicity, respiratory toxicity.

