

## what's under

BY DASHKA SLATER

**S**ince cleanliness comes in just below godliness on the moral pyramid, it's not surprising that many of us attribute miraculous powers to the cleaning products stashed in our cabinets. Scouring pads and spray bottles have become talismans to vanquish the archdemons of dirt, grease, mold, odors, and germs.

Unfortunately, grime-busting has plenty of not-so-clean consequences. A typical bottle of all-purpose cleaner contains Butyl Cellosolve (also known as ethylene glycol monobutyl ether), a chemical that can cause blood and bone-marrow damage at high exposures. Butyl Cellosolve can get into your system through skin contact or inhalation of vapors. The long-term, cumulative effects of such exposures are not fully known.

After you've rinsed the tub, flushed the toilet, and dumped the mop bucket, chemicals like this can end up in lakes, streams, bays, and estuaries. Sewage-treatment plants may not completely remove all water-borne contaminants, and even filtered chemicals have to go *somewhere*. Some sewage sludge is incinerated, sending the toxics into the air. Or it's used as fertilizer, which can leach into groundwater. All good reasons to do some spring cleaning—by getting rid of the nastiest items under the sink.

When you give these harsh cleaners the boot, don't just toss them in the garbage. Some are considered hazardous waste. Call your city or county waste agency to find out how to dispose of toxic trash, and help leave the environment as clean as your countertops. ■

*Dashka Slater is a regular contributor to Sierra. For more information, see the online version of this article at [www.sierraclub.org/sierra](http://www.sierraclub.org/sierra).*



**GLASS CLEANERS:** Many of the best-selling retail brands no longer contain ammonia—a powerful eye and lung irritant. But they may contain other harmful chemicals, including Butyl Cellosolve and methanol (methyl alcohol), which can cause blindness or death if accidentally ingested. For a green alternative, mix equal parts water and vinegar (or lemon juice) and apply with a spray bottle.



# your sink



**DISH CLEANERS:** Many automatic dishwasher detergents are high in phosphates, which create algae blooms in bodies of water. They may also contain chlorine bleach, an eye and lung irritant with a nasty byproduct: toxic organochlorines that are formed when bleach goes down the drain. Liquids for hand-washing dishes aren't as harmful, but they may contain nonbiodegradable, petroleum-based detergents. You can find low-impact alternatives at most health-food stores and even in supermarkets. Look for phosphate- and chlorine-free dishwasher detergents and dishwashing liquids made from plants, not petroleum.

**BATHROOM CLEANERS:** Relentless advertising has convinced us that it takes a small army of products just to clean the bathroom: toilet cleaners, tile scrubbers, sink and tub scourers, antibacterial cleaners, mold and mildew fighters, deodorizers, and stain removers. But not only are these products a cauldron of creepy chemicals, they're also unnecessary. You can whip up your own grime-fighters instead, using a few relatively benign ingredients (and a little extra elbow grease). Baking soda makes an excellent scouring powder. White vinegar or lemon juice cleans and deodorizes. And soap and water cleans as well now as it did in your great-grandmother's day.

**DRAIN OPENERS:** With extremely corrosive active ingredients like lye and sulfuric acid—which can cause burns, scarring, and blindness—drain openers are some of the most dangerous products found in the average home. If you're on a septic system, these chemicals can also kill the microbial bacteria that make it work. The best alternative is prevention: Use

a drain catch to keep hair and food from clogging the pipes in the first place. Dissolve small blockages by packing the drain with a quarter-cup of baking soda and then adding a half-cup of vinegar. Plug the drain and let the mixture bubble like a volcano for 15 minutes. Then flush with hot water. Tougher clogs may need a plumber's snake—or a plumber.