

Make Your Home a Safe Place



There's household hazardous waste around my house.

True False Almost every home has leftover products such as paint thinner, insect sprays, oven cleaner, metal polish or motor oil. These products contain chemicals that can harm people, wildlife or the environment.



"Can't I just pour it down the drain?"

It depends on the product. For years, many people disposed of unwanted household products by pouring them down the drain. This may be an acceptable disposal method for some substances, depending upon their chemical composition.



Pouring some substances down the drain, however, is one way to ruin drinking water supplies. For example, if your home's plumbing is connected to a septic tank, pouring certain types of household hazardous waste (HHW) down the drain can kill off the organisms that break down wastes in the tank. These untreated wastes are then discharged directly to your backyard soil.

Or, the HHWs themselves may pass through your septic tank unchanged. Once they enter the soil, they can seep down into the ground water that supplies wells. Unfortunately, a teaspoonful of some chemicals can contaminate many gallons of ground water, and make that water unsafe to drink.

Similarly, pouring certain HHWs down the drain can kill the biological organisms at your community's sewage-treatment facility. This can result in discharge of untreated sewage – and the chemicals – to nearby waterways.

The Backyard Blues....

...reds, yellows and greens. Some people feel that dumping out expired and unwanted household products in the backyard is a good way to get rid of them. After all, if you have a big backyard and a small container of household chemicals, what does it matter?

One problem can occur if children or animals come in contact with the chemicals that have been disposed of in the yard. When poured on the soil, the liquid spreads out and soaks downward. The next rain comes, any chemicals that have been disposed of in the top layer of soil will spread out and can migrate to groundwater supplies or to surface waters.

Most households have several gallons of household chemicals on hand. If all the people in your neighborhood dispose of their HHWs by dumping them in the backyard, these wastes can accumulate in soil, surface water and groundwater. Imagine all the wastes from your city being disposed of this way every year, and you can see how wells and drinking water reservoirs might one day become too polluted to use.

The Story on Storage

You can reduce HHW by properly storing products containing hazardous chemicals. Here is how:

- ✓ Shut lids tightly so products will not dry out, evaporate or leak. Then you will not have to dispose of them and buy more.
- ✓ Keep substances in the original containers. Write the date you purchased the product on the label and make sure the label stays on. This way, you will know what is inside if you dispose of the product or if an HHW collection program is started in your community.
- ✓ Store products containing hazardous chemicals in a cool, dry place. This is particularly important if the ingredients are flammable.
- ✓ Keep incompatible chemicals separated. For example, do not store household ammonia and bleach together. If the two substances combine, they form a toxic gas that can be fatal if you inhale it.
- ✓ Periodically check containers for deterioration, especially those stored under sinks. If the original container is leaking, enclose it in a larger container and labeled appropriately.

Safety Takes First Place

When you use hazardous chemicals, use common sense:

- ✓ Read and follow the directions on the label. Use the product at the recommended strength. Remember, more is not necessarily better. In fact, using more than the recommended amount may be hazardous to your health and the environment.
- ✓ Do not mix chemical substances unless instructed by the label directions.
- ✓ Use products in a well-ventilated area.
- ✓ Wear protective clothing if recommended on the label. If using liquids that may splash, consider wearing safety glasses. Wash your hands thoroughly when you are finished working.



Seeing It Through Once you have purchased a product containing a hazardous chemical, it is your responsibility to dispose of that waste material and its container properly.

First, recycle your household chemicals whenever possible. One method of recycling is to give away leftover paint, weed killer, swimming pool chemicals and other substances to someone who can use them. Before giving a pesticide away, always ensure the complete label is still intact. You can also look for local recycling programs for many substances. Visit the department's webpage, recyclesearch.com/profile/mo-directory, to locate a collection nearest you. If you must dispose of a waste material, do it safely. If a waste material cannot be disposed of in a safe manner now, you should keep it for a household hazardous waste collection event. To find out if a HHW collection event is scheduled in your area, please contact your local Solid Waste Management District. To find your district, go to the department's page at: dnr.mo.gov/env/swmp/swmd/swmdinfo.htm. Use the following guidelines for disposing of any household chemicals that you can no longer use.

CLEANING SUPPLIES

PRODUCT	HAZARDOUS INGREDIENTS	HAZARDOUS PROPERTIES	RECOMMENDED DISPOSAL METHODS
Drain Cleaner	Sodium or potassium hydroxide, sodium hypochlorite, hydrochloric acid	Corrosive Toxic	Disposal of this chemical is discouraged. Pour down the drain and flush with plenty of water. Otherwise, save contents or container for an HHW collection event.
Lye Oven Cleaner	Sodium or potassium hydroxide, ammonia	Corrosive Toxic	Give them away. If not possible, wrap tightly, place in a larger, closed container and put in the trash. Otherwise, save contents or container for an HHW collection event.
Upholstery & Rug Cleaners	Naphthalene, perchloroethylene, oxalic acid, diethyleneglycol	Irritant Corrosive Toxic	Give them away or store safely until an HHW collection event is held.
Furniture & Floor Polish	Petroleum distillates	Flammable Toxic	DO NOT pour down the drain. Solidify any liquids with kitty litter or other absorbent, wrap tightly, place in a larger, closed container and put in the trash. Otherwise, save contents or container for an HHW collection event.
Bleach Cleaners	Sodium or potassium hydroxide, hydrogen peroxide, sodium or calcium hypochlorite	Corrosive	Pour down the drain and flush with plenty of water. Septic tank users should not pour more than a cupful down the drain at one time. Otherwise, save contents or container for an HHW collection event.
Ammonia-based Cleaners	Ammonia, ethanol	Irritant Toxic Corrosive	Pour down the drain and flush with plenty of water. Otherwise, save contents or container for an HHW collection event.
Powder or Abrasive Cleaners	Trisodium phosphate, ammonia, ethanol	Irritant Corrosive Toxic	Solidify any liquids with kitty litter or other absorbent, wrap tightly, place in a larger, closed container and put in the trash. Otherwise, save contents or container for an HHW collection event.
Mothballs	Naphthalenes, paradicholobenzene, methylene chlorides	Toxic	Take to an HHW collection or a pesticide collection event. Wrap tightly, place in larger, larger container and put in the trash.
Disinfectants	Diethylene or methylene glycol, sodium hypochlorite, pine oil	Corrosive Toxic	Pour down the drain and flush with plenty of water. Septic tank users should not pour more than a cupful down the drain at one time. Take to an HHW collection or a pesticide collection event.
Toilet Cleaner	Muriatic (hydrochloric) acid or oxalic acid, calcium hypochlorite, paradichlorobenzene	Irritant Corrosive Toxic	Pour down drain and flush with plenty of water. Septic tank users should not pour more than a cupful down the drain at a time. Otherwise, save contents or container for an HHW collection event.
Silver Polish	Acidified thiourea, sulfuric acid, petroleum distillates	Corrosive Toxic	Solidify any liquids with kitty litter or other absorbent, wrap tightly, place in a larger, closed container and put in the trash.

PAINT AND DECORATING SUPPLIES

PRODUCT	HAZARDOUS INGREDIENTS	HAZARDOUS PROPERTIES	RECOMMENDED DISPOSAL METHODS
Solvent-based Paints	Pigments, petroleum distillates, mineral spirits	Flammable Toxic	Give them away, if possible. Store safely and save for an HHW collection event.
Latex or Water-based Paints	Generally non-hazardous		Give them away, if possible. Mix with absorbent material, let dry and place in trash.
Paint Thinners and Turpentine	Alcohols, chlorinated solvents, esters, hydrocarbons, ketones	Flammable Toxic	Store in a closed container until particles settle. Strain the thinner through a fine mesh sieve. Re-use the liquid and store the concentrated particles for an HHW collection event. If liquid is spent, then also store container for a HHW collection event.
Furniture Stripper	Methylene chloride, phenols, solvents	Flammable Toxic	Store safely and save for a hazardous waste collection program.
Wood Preservatives	Chlorinated phenols, copper or zinc naphthenate, creosote, magnesium silicofluoride	Flammable Toxic	Store safely and save for an HHW collection event.
Wood Stains	Mineral spirits, glycol ethers, ketones, halogenated hydrocarbons, naphtha	Flammable Toxic	Give them away, if possible. Latex-based stains should be mixed with absorbent material, wrapped tightly and put in the trash. For others, store safely and save for an HHW collection event.

AUTO PRODUCTS

PRODUCT	HAZARDOUS INGREDIENTS	HAZARDOUS PROPERTIES	RECOMMENDED DISPOSAL METHODS
Antifreeze	Ethylene glycol	Toxic	Recycle by taking to a service station or reclamation center.
Transmission Fluid, Used Oil, Kerosene, Diesel Fuel	Hydrocarbons, mineral oils	Flammable Toxic	Recycle by taking to a service station or reclamation center.
Brake Fluid	Glycol ethers, heavy metals	Flammable Toxic	Disposal of this chemical is discouraged. Take to a service station or store safely until an HHW collection event is held.
Auto Battery	Sulfuric acid, lead	Corrosive Toxic	Exchange when buying a new battery, take to a recycler or take to a service station or battery shop. Or store in a dry place and save for an HHW collection event.
Windshield Washer Solution	Methyl alcohol	Flammable	Pour down the drain with lots of water. Otherwise, save contents or container for an HHW collection event.
Waxes, Polishes, Cleaners	Caustics, acids, petroleum distillates	Corrosive Flammable	Wrap tightly, solidify any liquids with absorbent, place in a larger, closed container, and put in the trash. Otherwise, save contents or container for an HHW collection event.

OTHERS

PRODUCT	HAZARDOUS INGREDIENTS	HAZARDOUS PROPERTIES	RECOMMENDED DISPOSAL METHODS
Medicines	Numerous ingredients	Varied	Take to a local pharmaceutical take-back or collection program. To find one, contact your local Solid Waste Management district or the pharmacy you use.
Swimming Pool Chemicals	Sodium hypochlorite, other chlorinated compounds	Toxic Corrosive	Give away or store safely and save for an HHW collection event.
Fiberglass and Epoxy Resins	Solvents, peroxides	Toxic Flammable	Mix according to directions and allow to harden. Put in the trash. If components cannot be safely mixed, save contents or container for an HHW collection event.
Photographic Chemicals	Acids, caustics, hydroxides, nitrates, others	Corrosive	Pour down the drain and flush with plenty of water. Septic tank users SHOULD NOT pour more than a cupful down the drain at one time. Otherwise, save contents or container for an HHW collection event.

Herbicides and pesticides, such as fungus- and insect-control chemicals, include flea collars and sprays; roach and ant killers; rat and mouse killers; and weed and brush killers. The department recommends owners store them safely and wait to dispose of them at an HHW collection or a pesticide collection event.

The answer is up to you.

Local ordinances pertaining to disposal may vary. If in doubt, check with local officials. Information contained on this poster is based on state and federal laws, and current scientific research. Disposal recommendations may change over time as new laws and information are developed. Contact the department if you have any questions.