

Common household products containing hazardous materials can pose a threat to people and the environment, especially when handled or disposed of improperly. This brochure is intended to serve as a guide for safe handling and management of many household hazardous products and wastes. Also, it offers less hazardous substitutes for common household products.

When managing household hazardous products, there are two basic principles to keep in mind:

1) Whenever possible, use up a product or donate it to someone who can. In many cases, even products that have been stored for a few years can still be safely used according to label directions. In addition, some wastes such as used motor oils, solvents and car batteries can be regenerated or recycled.

2) Buy the smallest amount of material needed to get the job done. Better yet, use a less-hazardous alternative in place of the hazardous product.

If you have household hazardous waste to dispose of, find out whether your local solid waste management district will be holding a collection event. Call Ohio EPA's Division of Solid and Infectious Waste Management if you don't know how to contact your solid waste management district.

Handling Your Household Wastes

ACIDS/ALKALINES

Acids (hydrochloric, muriatic, sulfuric) and alkalines or caustics (ammonia, lye) are typically the main ingredients in cleaning compounds and drain openers. Use these materials up according to label directions whenever possible. These products are usually still good even when a few years old. However, be sure not to mix products together or dangerous fumes could result.

AEROSOLS

Be sure to empty aerosol containers completely before disposing with other trash to prevent an explosion hazard. If the can still has some product in it, remove the propellant by turning the can upside down and pushing the nozzle. Check to see if your local recycling program accepts aerosol cans. Purchase products in non-aerosol forms (pump-spray, roll-on or liquid).

ANTIFREEZE

Used antifreeze can be diluted thoroughly with water and poured down the sanitary sewer drain. Do not pour antifreeze into an outdoor storm sewer, where it may go directly to a waterway without treatment. Animals and children are attracted to the sweet taste of antifreeze, so store or dispose of it where they won't be tempted to drink it.

BLEACH

Even old bleach can be used according to label directions as a cleaning agent and disinfectant. If you can't use it, see if a neighbor can. *NEVER* mix bleach with ammonia or with acidic products such as some drain, toilet bowl and metal cleaners. Toxic fumes (strong enough to be fatal) will result.

CAR BATTERIES

Take old car batteries to a retailer. Check your yellow pages under "Batteries" for stores that sell new batteries and take used batteries to be recycled.

CLEANERS AND POLISHES

Cleaners and polishes (rug, door and oven cleaners; furniture polish) should be used up whenever possible. Seal empty containers and dispose of them with the rest of your garbage.

DISINFECTANTS

Disinfectants contain strong chemicals, so use them up according to label instructions and with caution.

GAS CYLINDERS

Butane, propane or other pressurized gas cylinders should not be disposed of with other trash because of the serious explosion hazard. Contact a retailer (under "Gas" in the yellow pages) to have the cylinder refilled or disposed of properly. If you are sure a cylinder is completely empty, is no longer under pressure and can't be reused, then it can be disposed of in the trash.

GASOLINE

Avoid buying more than you can use in six months and store in a cool dry place. Gas less than one year old can be safely used as fuel in your car, lawnmower or snowblower, etc., when first strained through a paint filter and then mixed with at least an equal amount of fresh gasoline. For older gasoline or gas/oil mixes, look under "Oils-Waste" in the yellow pages for a company that will take residential material.

KEROSENE

Avoid buying more than you can use within a year, and store in a cool dry place.

MERCURY

Mercury is highly toxic and can be absorbed through the skin. Remember three important things: **DON'T TOUCH MERCURY. DON'T THROW MERCURY IN THE GARBAGE. DON'T CLEAN UP MERCURY WITH A VACUUM CLEANER.** If you have spilled mercury by breaking a thermometer, wear gloves and collect the small drops with a wet paper towel, a cotton ball or an eye dropper. Place the debris in a zip-lock bag, and dispose in the trash. (There is currently no better disposal option for broken thermometers) For larger amounts of mercury, your local high school or university laboratory, or local dentist may be interested in taking it. Otherwise you can send mercury to a recycler. Ohio EPA maintains a list of mercury recyclers; however, all of these are located out of state. Contact your local solid waste management district office for additional ideas on locating mercury recyclers.

PAINT

Small amounts of paint can be hardened by taking the lid off the can and adding sand or cat litter or a commercially available paint hardener. Once the paint is solid, you can put it in the trash. Paint that is still usable should be donated to a neighbor, school, theater group or community organization.

PESTICIDES/HERBICIDES

Use pesticides and herbicides according to label directions. Avoid disposal whenever possible. If you can't use the material, see if a neighbor or local garden club can. Also, never reuse the containers. Empty containers should be rinsed three times in water. Then spray the rinse water on your lawn or garden. Contact your Ohio State University Extension Office or the Ohio Department of Agriculture for information on handling large amounts of pesticides that can't be used.

SOLVENTS

You can clean used solvents (paint thinner, turpentine, varnish, stripper) by allowing the paint or dirt particles to settle out in a glass container. Gently pour the cleared solvent into another container to use again and discard the sludge in the trash. Do not dump onto soil, or down sewers, drains or the toilet. Large amounts of solvents (more than 10 gallons) should be taken to a recycler. Contact your local solid waste management district for ideas about how to find outlets for your solvents.

USED MOTOR OIL

Motor oil is easily recycled. Contact your local solid waste management district office for information about the recycling outlet nearest you, or call local service stations and ask if they will accept your used oil. A convenient way to hold oil for recycling is to funnel it into a cleaned, old plastic milk jug or gallon container.

ALTERNATIVES TO TOXIC SUBSTANCES

PRODUCTS

LESS TOXIC ALTERNATIVES

Drain cleaners	Pour boiling water down the drain. Use a plunger or a plumber's "snake."
Chlorine bleach	Baking soda and water, Borax or natural sunlight (you must use bleach as a disinfectant).
Paints and Solvents	Use water-based (latex, acrylic) paint if possible.
Paint remover/stripper	Heat guns may be used for removing many paints, but only in well-ventilated areas. Avoid using them for lead-based paints.
Pesticides	Learn which insects are beneficial in managing "pests." Keep your lawn and garden weed-free. Remove and destroy infected plants. Refer to an organic gardening book.
Houseplant insecticide	Spray soapy water on leaves, then rinse, or rub infested leaves with a cotton ball soaked with rubbing alcohol.
Herbicides	Hand-pull weeds or mulch generously. Cover garden with plastic in the fall to prevent weed germination. Also, use biological controls such as lady bugs or praying mantises.
Oven cleaners	Use baking soda for scouring. For baked-on grease, heat oven to 200 degrees, turn off, and leave 1/4 cup ammonia in a dish in the oven for several hours to loosen. Then scrub with baking soda. Save the ammonia to be used again.
Furniture polish	Make a non-toxic polish by melting 1 tbsp. Carnauba Wax into 2 cups mineral oil. For lemon oil polish: dissolve 1 tsp. lemon oil into 1 pint mineral oil.
Spot remover	Immediately soak in water, lemon juice, club soda, or corn meal and water.
Silver cleaner	Soak silver in 1 quart warm water with 1 tsp. baking soda, 1 tsp. salt, and a small piece of aluminum foil.
Window cleaner	Use a pump spray container filled with 2 tbsp. vinegar in 1 quart water (label and date container), or rub newspaper on the glass.
Toilet bowl cleaner	Use toilet brush and baking soda, mild detergent or 1/2 cup bleach.
Mothballs	Use cedar chests or place cedar chips around clothes.
Roach Repellant	Cut hedge apples (Osage oranges) in half and place in the basement, in the cabinets, or under the house to repel roaches. Mix equal parts baking soda and powdered sugar and sprinkle in the infested area.

Another Way To Help

Contact your county commissioners to find out what your local solid waste management district is doing. Encourage local government agencies — such as your county or city health department, extension office, fire department and local chamber of commerce — to organize and help sponsor a household hazardous waste education and exchange program for your community.

Contact Information

Ohio EPA Division of Solid and Infectious Waste Management — (614) 644-2621.

For general information about solid waste management.
www.epa.ohio.gov/dsiwm/

Ohio Department of Agriculture Pesticide Regulation Section

1-800-282-1955 (In Ohio) ext. 3
 (614) 728-6897 (In Columbus) For information about banned or restricted pesticides, or for information about the agricultural pesticide collection program.
www.agri.ohio.gov/pesticides/

Ohio Department of Natural Resources Division of Recycling and Litter Prevention

(614) 265-6333. For information on recycling of aluminum cans, newspapers and other solid wastes.
www.ohiodnr.com/tabid/9394/Default.aspx

Poison Information Center

Check the front of your local telephone book.

Ohio State University Extension Office

Check the blue pages of your local phone book under "County Government Offices."

Safety Measures and Best Management Practices

If saving material for a collection event, keep in the original container. If necessary, store the original container in a second leak-proof container that is labeled and dated. Keep out of reach of children and pets and away from open flames and sources of heat.

DO:

- Buy and use less hazardous substitutes whenever possible.
- Buy only what you need.
- Wear gloves and protective clothing to prevent skin contact.
- Handle the substance gently, especially if you don't know what it is.
- Follow directions carefully when using any hazardous products.
- Keep hazardous substances out of the reach of children and pets and away from heat sources or open flame.
- Always read labels before you buy a product to be sure it will meet your needs.
- Keep labels on all your containers.
- Try to find someone else to use your unwanted material, but be sure you know what you have and inform them fully.
- Use non-aerosol products in reusable containers.

DON'T:

- Mix materials or wastes together.
- Dispose of large quantities of any toxic materials in a septic system.
- Bury or burn containers of leftover materials.
- Dispose of materials into the storm sewer.
- Breathe fumes from toxic materials.
- Buy aerosols; use pump sprays instead.

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