

REDUCING HAZARDOUS PRODUCTS IN THE HOME

Thousands of household products sold each year contain toxic ingredients. Examples include drain cleaners, oven cleaners, pesticides, and furniture polish. Used and disposed of properly, these products add to the convenience and comfort of our lives. However, if used improperly, these products can endanger our health and the air quality in our homes. Disposed of improperly, products containing toxic ingredients can contaminate our land and pollute our water supplies.

Many people think only of hazardous waste as that waste produced in plants and factories. But every home has a supply of potentially hazardous waste. The United States Environmental Protection Agency (EPA) defines a substance as hazardous if it is flammable, can react or explode when mixed with other substances, is corrosive, or is toxic. A number of products in kitchens, bathrooms, basements, utility sheds, and workshops contain caustic chemicals and solvents which can threaten family health and/or damage the environment. The challenge for today's consumer is to reduce the number of hazardous products in the home. What can you do to meet this challenge?

1. USE MULTIPURPOSE CLEANERS

Instead of purchasing a different product to clean each surface in your home, consider one or two products that will clean a variety of surfaces.

Selecting and using multipurpose cleaners can reduce the number of cleaners you buy, decrease the number of hazardous products in your home, and save you money. Read and follow label directions.

2. BUY THE LEAST HARMFUL PRODUCT AVAILABLE

Many household products used for household cleaning, car care, or yard care can be toxic, corrosive,

flammable, or reactive. All of these designations are considered hazardous. Any product considered hazardous must be labeled with signal words regulated by the federal government. The front label of the product must include a warning and a description of the hazard. Signal words are: "DANGER/POISON," "WARNING," and "CAUTION." "Caution" indicates the lowest level of toxicity and "Danger" the highest level of toxicity.



In addition to signal words, the product label must also include a statement telling you how to avoid the hazard and how to use the product safely.

To reduce the danger of hazardous products in your home, buy cleaners labeled "warning" or "caution" and pesticides with "caution" on the label. These products are less harmful.

When reading labels, do not be fooled by the words "nontoxic." This is an advertising term. It has no regulatory definition by the federal government so it can be used as the manufacturer wishes.

It is very important that you know as much as possible about products before you use them, so that you can protect yourself and your family. If a product label does not give a list of ingredients or adequate instructions for its safe use, choose another product.

3. USE PREVENTATIVE MEASURES

The old saying, "An ounce of prevention is worth a pound of cure," is true for cleaning and polishing. If soil is allowed to accumulate, the task of removing it becomes more difficult. Wiping spills when they occur can prevent stains and eliminate the need for

tough specialty cleaners, which often are more toxic and more harmful to surfaces. For example, harsh abrasive cleaners gradually scratch the finishes of sinks, bathtubs, and other porcelain enamel surfaces, and chlorine bleach can dull such finishes. Once the surface becomes scratched, it will get dirty faster and stain deeper and become almost impossible to clean and keep clean.

Wipe away grease and spills in the oven after each use, or put a liner on the oven bottom to catch spills and reduce the need for an oven cleaner.

Cover sink and shower drains with a screen to keep out food scraps and hair. Do not pour grease down the drain. Collect it in an empty can and put it in the trash. These actions will reduce the need for a drain cleaner.

Open windows to air out the house occasionally to avoid the use of chemical air fresheners.

Have an aggressive home maintenance plan. This will reduce the need for some hazardous products. For example, roaches and other insects are discouraged by good housekeeping practices.

Bathe pets frequently to eliminate fleas.

4. USE ALTERNATIVE OR LESS TOXIC HOMEMADE PRODUCTS

One way to get a safer product is to make it yourself. Homemade products have definite advantages, but they also have disadvantages. Be sure to consider the following:

What do you gain by making your own products?

Economy: Many of the ingredients are inexpensive, so you may save money over time.

Storage space: Many of the ingredients are common household products you already have, and you can mix up small batches so that you do not have to store many products.

Control of the chemicals in your home: Since you mix them, you decide the amount and type of chemicals in the cleaning products you use.

Safety: Homemade products generally have less toxic chemicals in them. They are safer for you, the

air in your home stays cleaner, and disposal of these products is less dangerous.

What are the problems related to homemade products?

Time: Since homemade products may not be as strong as commercial products, it may take more time for them to work. Time must also be expended to make the product.

Human energy: Since homemade products may not be as strong as commercial products, you may have to scrub harder to get acceptable cleaning results.

Cleaning results: Homemade products may not clean as well as the commercial products you have been using. If you have used harsh cleaners on surfaces over a long period of time, the surface may be scratched. You will probably need strong chemicals to clean stains on such surfaces.

Safety: While it is true that most homemade products are made from harmless products generally found in the kitchen or bathroom, it is possible to create dangerous homemade products if incompatible products are mixed together. One should never mix chlorine bleach and ammonia, for example, as harmful fumes can result.

If you decide to make your own cleaners, you must use and store them safely. While the ingredients in homemade cleaners are safer, they are not all non-toxic. Keep these guidelines in mind:

1. Be careful what chemicals you mix. Some chemicals, such as chlorine bleach and ammonia, produce a very toxic gas if they are mixed together.
2. Do not mix more than a month's supply at a time. The chemicals may lose their effectiveness.
3. Mix solutions in a well-ventilated area.
4. Store all cleaning solutions out of reach of children.
5. Store solutions in unused, store-bought containers. Use permanent containers that are kept in a permanent location. Never put them in old food containers. They may interact with residue from the original contents or they may be mistaken for food or beverage.
6. Label containers carefully. This is especially important if other people in your home clean or have access to the cleaners.

MANAGING HAZARDOUS PRODUCTS

Sometimes there are no satisfactory alternatives to hazardous household products. However, you can still reduce the risks to your family and your environment by making wise buying decisions and by handling products properly. This will help reduce hazardous waste problems. Here are some tips for selection, use, and storage:

When Buying:

1. Read labels. Make sure the product will do what you want and that you will feel safe using it. If ingredients are not listed, choose another product.
2. Select the least hazardous product. Let the signal words *danger/poison*, *warning* or *caution*, be your guide.
3. Buy only as much as you need and use it up in a short period of time.
4. Carefully consider the product and its use. Will an aerosol, pump spray, powder, liquid, or solid form be the best alternative?
5. Choose water-based paint, glue, shoe polish, and similar products rather than solvent-based products.

When Using:

1. Read the directions and follow them. Using more of a product does not mean you will get better results.
2. Wear protective equipment, such as rubber gloves, as recommended by the manufacturer.
3. Handle products carefully to avoid spills. Keep the container closed tightly when it is not being used to avoid fumes and spills.
4. Use products in well-ventilated areas. When working indoors, open windows and use a fan to circulate the air toward the outside. Take plenty of fresh-air breaks.
5. Do not eat, drink, or smoke while using hazardous products. Traces of chemicals can be carried from hand to mouth.
6. Do not mix products unless directions say that you can do so safely. Even different brands of the same product may contain incompatible ingredients.

7. If you are pregnant, avoid exposure to toxic chemicals. Many toxic products have not been tested for their effects on an unborn infant.
8. Do not wear soft contact lenses when working with solvents and pesticides. They can absorb and hold chemicals next to your eyes.
9. Carefully and tightly seal products when you finish. Escaping fumes can be harmful and you will avoid spills.
10. Use common sense.

When Storing:

1. Follow label directions.
2. Leave the products in their original container with the original label attached.
3. Never store hazardous products in food or beverage containers.
4. Make sure lids and caps are tightly sealed.
5. Store hazardous products on high shelves or in locked cabinets out of reach of children and animals.
6. Store incompatible products separately. Keep flammable products away from corrosive products.
7. Store volatile products, those that warn of vapors and fumes, in a well-ventilated area.
8. Keep containers dry to prevent rusting.
9. Store rags used with flammable products, such as furniture stripper and paint remover, in sealed, marked containers.
10. Keep flammable products away from heat, sparks, or sources of ignition.
11. Know where flammable materials are located in your home and how to extinguish them. Keep a fire extinguisher or materials to control fires where you can get to them quickly and easily.
12. Never store hazardous products in the same area as food.

SUMMARY

There are several ways you can reduce the amount of hazardous product in your home and protect the environment.

- Buy and use multipurpose cleaners.
- Buy the least harmful product. Read labels.
- Wipe up spills when they happen.

Reducing the number of hazardous products you buy reduces the sources of household hazardous waste later. Wise buying decisions and good management practices can reduce the hazards in our homes, in the air we breathe, and in the water we drink.

REFERENCES

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Recipes for a Healthy House

All-purpose Cleaner I

4 tablespoons baking soda
1 quart warm water
Dissolve baking soda in warm water. Apply with a sponge. Rinse with clear water.

All-purpose Cleaner II

Apply baking soda to a damp sponge. Rinse with clear water.

All-purpose Cleaner III

1 tablespoon ammonia*
1 tablespoon liquid detergent
1 pint water (2 cups)
Mix ingredients and put in spray bottle. Spray on surface. Wipe. Rinse with clear water.

**Ammonia is a toxic ingredient. Handle it with care and store it safely.*

Window and Mirror Cleaner I

4 tablespoons ammonia*
1 quart warm water
Mix ingredients and put in spray bottle. Spray on surface. Wipe.

**Ammonia is a toxic ingredient. Handle it with care and store it safely.*

Window and Mirror Cleaner II

2 tablespoons vinegar
1 quart warm water
Mix ingredients and put in spray bottle. Spray on surface. Wipe.

Drain Opener*

Use a plunger (plumber's helper). It may take a number of plunges to unclog the drain.

**Do not use this method if you have used a commercial drain opener and it may still be present in the drain.*

Drain Cleaner and Opener

Use a flexible metal snake. The mechanical snake may be purchased or rented. Thread it down the clogged drain, and you will be able to push the clog away.

Furniture Cleaner and Polish I

3 cups olive oil
1 cup vinegar
Mix together until well blended. Use a clean, soft cloth to apply to the furniture.

Furniture Cleaner and Polish II

Wet a washcloth. Wring out as much water as possible. Wipe furniture surface with damp washcloth. Dry immediately with a clean, soft, dry cloth. (You can remove sticky fingerprints and dust safely from wood surfaces using this method, but furniture with an oil finish needs an oil-based cleaner.)

Lime and Mineral Deposit Remover

Soak paper towels in vinegar. Apply the paper towels to the lime deposits. Leave them on for approximately one hour. The deposits will be softened and can be removed easily.

Aluminum Cleaner

2 tablespoons cream of tartar
1 quart water
To clean aluminum cookware, combine ingredients in cookware. Bring solution to a boil and simmer for 10 minutes. Wash and dry as usual.

Brass Cleaner I

Lemon juice
Baking soda
Make a paste about the consistency of toothpaste. Rub onto brass with a soft cloth. Rinse with water and dry.

Brass Cleaner II

Lemon juice
Cream of tartar
Make a paste about the consistency of toothpaste. Apply to surface, leave on for five minutes. Wash with warm water. Dry with a soft cloth.

Chrome and Stainless Steel Cleaner

Dip soft cloth in undiluted white vinegar. Wipe surface.

Oven Cleaner I

Baking soda
Very fine steel wool
Sprinkle water on oven surface. Apply baking soda. Rub using very fine steel wool. Wipe off scum with a damp sponge. Rinse well and dry.

Oven Cleaner II

While oven is still warm, sprinkle water on the spill, then sprinkle salt on it. When the oven cools down, scrape the spill away and wash the area clean.

Toilet Bowl Cleaner I

Baking soda
Vinegar
Sprinkle baking soda into the toilet bowl. Add vinegar. Scour with a toilet brush.

Toilet Bowl Cleaner II

Pour 1/2 cup liquid chlorine bleach* into toilet bowl. Let stand for 30 to 45 minutes. Scrub with a toilet brush. Flush.

**Do not mix chlorine bleach with vinegar, toilet bowl cleaner, or ammonia. Chlorine bleach is a toxic ingredient. Handle it with care and store it safely.*

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2350