

### Hazardous Household Chemicals

Chemicals used in the home and garden can be hazardous to your health.

### HOUSEHOLD PRODUCTS DATABASE

<http://householdproducts.nlm.nih.gov/products.htm>  
Common Household Hazardous Waste Categories

Household cleaners	Personal hygiene products	Pet-care products
Paint and paint products	Pesticides and fertilizers	Automotive fluids

Improper storage, transport and disposal of these products can contribute to burns, heart problems, kidney failure, lung (respiratory) ailments, cancer and even death.

### Government Regulations

Regulations are designed to protect consumers and reduce the risk of hazardous chemicals. The regulations reflect current scientific research done on the products and how they might interact with other products.

### Labels



Workplace Hazardous Materials Information System

### MSDS Material Safety Data Sheets

An MSDS information sheet for the product gives a detailed description of the product – its composition, physical appearance, and chemical characteristics. It also describes the precautions that should be taken when handling, transporting and disposing of the product, as well as health effects, first aid treatment and what to do in case of a spill.

### Eco-Label - "Environmental Choice"

Eco-Logo program helps consumers identify products and services that are less harmful to the environment.



Different labels have different purposes:

### Transporting Hazardous Materials



Figure 2  
POISON Figure 2

Workplace Label controlled products transferred at the workplace to other containers, need to apply a workplace label to the new container providing the following information: product identification; information for safe handling and a statement indicating that the MSDS is available.

### Supplier label

#### Toilet Bowl Cleaner

**DANGER:** Corrosive – produces chemical burns. Contains hydrochloric Acid. Do not get in eyes, on skin or clothing. May be harmful if inhaled or swallowed. Do not breathe vapors or fumes. Keep out of reach of children. Harmful and corrosive to metal.

**STORAGE AND DISPOSAL:** Store in original container out of reach of small children. Keep securely closed in a cool, well-ventilated area. Do not reuse empty container. When empty, clean it out or recycle.

### Disposal label

#### HAZARDOUS WASTE

FEDERAL LAW ENFORCES UNLAWFUL DISPOSAL OF HAZARDOUS WASTE  
Other Applicable State & Local Laws  
DO NOT REUSE OR RECYCLE  
DO NOT BURN  
DO NOT REUSE OR RECYCLE  
DO NOT REUSE OR RECYCLE

### New Product Regulations

When new products are produced, the supplier must apply for approval to make it available to the consumer. The information about the product must include:

- Intended use
- physical and chemical properties
- active ingredient(s)
- Instructions for use
- safety precautions
- Health effects
- environmental effects
- toxicity to humans
- first aid instructions in case of poisoning

### Storage of Hazardous Chemicals in the Home

- Leave original label on the product
- Keep out of reach of children (locked up)
- Containers should be in good condition and secure
- Store in a cool, dry, well-ventilated place
- Never store flammables or gas in glass containers
- Store different classifications of chemicals on separate shelves in separate locations
- Keep oxidizers away from flammables
- Keep upright
- Store chemical in proper place when not in use
- Discard old products
- Place rusted or leaking containers inside a second container – dispose of both

### Transportation of Consumer Goods

When it is purchased and when it is disposed of present transportation issues for consumers. Care should be taken to ensure that passengers are not at risk – from spills, leaks, fumes or accidental handling (by children or pets). Place the product upright and secure in the trunk (car) or box (truck). When disposing of many products never mix them into one container – try to keep them in their original containers with their original labels.

### Disposal of Hazardous Chemicals

Never pour hazardous chemicals down the drain, or into the soil. Don't throw them into the garbage. The hazardous products may not be treated by the sewage treatment system or septic system and as a result could be released into the soil or enter the surface water system and harm living organisms downstream.



### Collection Sites

Materials that cannot be recycled or stored safely in the ground to biodegrade are packaged into larger containers and are then transported to high temperature incinerators at special hazardous waste treatment facilities like the one pictured above.



### Solid Waste Landfill

Follow your local GARBAGE DISPOSAL guidelines that have been created to avoid toxic or hazardous products being placed in a sanitary landfill, where they might burn, explode or escape as a leachate into the groundwater and eventually come back to haunt us.



The **U.S. Environmental Protection Agency (EPA)** is an agency of the US federal government, chiefly responsible for the environmental policy of the United States, established to protect human health and the environment.

Prior to the establishment of the EPA, the federal government was not structured to regulate the pollutants which harm human health and degrade the environment.

The EPA is assigned the task of repairing the damage already done to the natural environment and to establish new criteria to guide Americans in making a cleaner, safer America.

EPA conducts environmental assessment, research, and education. It has the primary responsibility for setting and enforcing national standards under a variety of environmental laws, in consultation with state, tribal, and local governments.

### EPA PROGRAMS

Energy Star

Pesticide Registration

Environmental Impact

Safer Detergents Stewardship Initiative

Fuel Economy Test Results

Air quality Models and Simulations

Oil Spill Prevention and Containment

Water Sense

Drinking water (Clean Water Act)

Research vessel - the USNS *Bold*

Advance Identification