

ESP FOCUS

Hazardous Materials



Your home can become a hazmat site!

Perhaps you've been stuck in traffic on the freeway or watched on television as local responders have worked to remove oil, acid or other hazardous materials that have spilled. Such incidents can affect hundreds, if not thousands, of people.

The Seacliff train derailment in 1992 closed Highway 101, cutting off the main access from Ventura to Santa Barbara and forcing the evacuation of more than 300 residents of Seacliff, La Conchita, and Mussel Shores for six days. In February 1996, a five-car train carrying dangerous chemicals derailed in San Bernardino County's Cajon Pass and caught fire. About 100 patrons of two nearby gas stations, a motel and a restaurant were voluntarily evacuated.

Hazardous materials aren't restricted to the highway, local refinery or manufacturing firm. Motor oil, paint, pool chemicals and other common household products could make your home a potential site for a mini hazardous materials (hazmat) incident, particularly in an earthquake. Strong ground shaking could topple and break bottles and cans containing hazardous materials.

Use the information on the reverse side of this *Focus Sheet* to identify common household products that pose a danger and how to handle and dispose of them wherever you live, work, or play.



Hazardous Household Products

Hazardous products and substances are classified into four categories based on the property or properties they exhibit. **Corrosive** substances or vapors deteriorate or irreversibly damage body tissues with which they come in contact and erode the surface of other materials. **Flammable** substances are capable of burning in the air at any temperature. **Toxic** substances may poison, injure or be lethal when they are eaten, absorbed through the mouth and stomach, absorbed through the skin or inhaled into the lungs. **Reactive** substances can produce toxic vapors or explode when they react with air, water or other substances.

Corrosive Products

Abrasive cleaners, scouring powders*
 Ammonia, bleach-based cleaners*
 Car batteries
 Chlorine bleach
 Disinfectant and oven cleaners*
 Drain openers and cleaners*
 Glass and window cleaners*
 Photographic and pool chemicals*
 Rug and upholstery cleaners**
 Toilet bowl cleaners**

Flammable Products

Air fresheners
 Coin, floor, furniture or shoe polish*
 Enamel or oil-based paints*
 Engine cleaners and degreasers*
 Furniture and paint strippers*
 Gasoline and diesel fuel*

Hair spray, deodorants
 Kerosene*
 Motor oil* and transmission fluid*
 Paints and primers*
 Rug and upholstery cleaners**
 Rust paints*
 Solvent-based glues*
 Solvents for cleaning firearms*
 Spot removers*
 Stains and varnishes**
 Wood preservatives

Toxic Products

Antifreeze
 Artist and model paints
 Batteries
 Car wax containing solvents
 Chemical fertilizers
 Drugs, medicines, pharmaceuticals

Fungicides, herbicides, weed killers
 Insecticides
 Latex, oil or water-based paints
 Mothballs
 Nail polish and nail polish remover
 Pet products, flea collars, flea sprays
 Rat, mouse, snail and slug poisons
 Roach and ant killers

* *chemical also contains toxic properties.*
 ** *chemical also contains flammable and toxic properties.*

Avoid mixing chemical products or cleaners. Mixing chemical products or cleaners can cause toxic or poisonous reactions.

Alternative cleaning Products

Several non-hazardous materials are available for use in cleaning carpets, dishes, upholstery, windows and other items, deodorizing sinks, as well as removing rust and stains. They include ammonia, baking soda, cornstarch, lemon juice, soap and water, steel wool and vinegar.

Buying Household Products

Consider the following tips when you buy household products:

- Read directions and health warnings.
- Look for the least-hazardous product.
- Purchase child-resistant substances.
- Use multipurpose cleaners.
- Buy only what you need.

Storing Household Products

Consider the following tips when you store household products:

- Use original containers for storage.
- Regularly check containers for wear and tear.
- Use larger, clearly marked containers to store leaking packages.
- Store materials in a cool, dry place.
- Separate incompatible products.

Using household products

Keep in mind the acronym **LIES**:

- L**imit amount of materials stored.
- I**solate the products in enclosed cabinets and keep containers tightly covered.
- E**liminate unused or unneeded supplies.
- S**eparate incompatible materials.

Also do the following when you use household products:

- Note and post the number of the local poison control center.
- Read and follow directions carefully.
- Use only the amount indicated.
- Avoid mixing chemical products or cleaners.

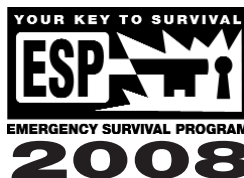
- Avoid splashing.
- Wear protective clothing, a dust mask and safety glasses.
- Work in well-ventilated areas.
- Take frequent breaks for fresh air.
- Keep away from children, expectant mothers.

Disposing Household Products

There are several ways you can dispose of hazardous household products. Options include using the entire supply, recycling unused portions, taking unused supplies to a household collection event and donating unused supplies to photo shops, local swimming pools, etc.

Extracted and adapted from "Hazardous Household Products: A Guide to the Disposal of Hazardous Household Products and the Use of Non-Hazardous Alternatives," California Department of Health Services, Toxic Substances Control Program.

HEALTH TIP: If you have been exposed to hazardous materials, you may be instructed to remove and dispose of your clothing right away and then wash yourself. Removing your clothing and washing your body will reduce or remove the hazardous materials.



This Focus Sheet is produced as part of the Emergency Survival Program (ESP). ESP is an awareness campaign designed to increase home, neighborhood, business and school emergency preparedness. ESP was developed by the County of Los Angeles. The California Governor's Office of Emergency Services (OES) and representatives from Contra Costa, Imperial, Inyo, Kern, Los Angeles, Marin, Mono, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Santa Cruz, and Ventura counties; Southern California Edison; the Southern California Earthquake Center and the American Red Cross assisted in the development of campaign materials and coordination of the campaign.