

## CONSUMER ACCESS TO CHEMICAL INFORMATION

Often, retail household cleaning products contain substances that are deemed hazardous. It is difficult to identify these substances because manufacturers are allowed to label these substances as confidential business information (CBI). The U.S. Environmental Protection Agency (EPA) has acknowledged that the inappropriate and excessive use of CBI claims has hidden important information from the public and even from EPA offices. Modifications to the chemical information reporting rule are ongoing. Visit the EPA website for more information on the agency's efforts to increase transparency in chemical access (*Increasing Transparency in TSCA* available at <http://www.epa.gov/oppt/existingchemicals/pubs/transparency.html>).

## CLEAN HOMES

A clean home reduces exposure to allergens, pesticides, consumer chemicals, and pest droppings and urine, and reduces shelter for pests. While it is important to keep your home clean to provide a healthy environment, cleaning product labels often display complex chemical terms. Additionally, commercial advertisements may exaggerate the performance of cleaning products. Therefore, to make informed decisions when comparing product performance and safety, consumers need to be familiar with the most common ingredients found in cleaning products.

This publication provides definitions of common ingredients and guidelines for selecting products for household use. Types of cleaning products include

- Disinfectants and sanitizers,
- Abrasives,
- Acids,
- Alkalis,
- Bleaching agents,
- Detergents, and
- Spirit solvents.

## DISINFECTANTS AND SANITIZERS

**Disinfectants** are more often used in clinics and hospitals than in household products. A disinfectant is a chemical that completely destroys all disease-causing organisms (pathogens). These include disease-causing strains of salmonella and staph bacteria. To be labeled as a disinfectant, the EPA stipulates that the product must destroy 99.999% of pathogens within 5 to 10 minutes. Disinfectants are applied directly to non-porous surfaces, such as diaper changing tables, countertops, door and cabinet handles, toilets, and other bathroom surfaces.

### Disinfectants for Household Use

**Liquid chlorine bleach** is a common household disinfectant. For detailed information, refer to the *Bleaching Agents* section in this publication.

**Quaternary ammonium compounds** are generally referred to as *quats*. These are salt compounds used with a variety of additional ingredients to create a safe and effective disinfectant. They are effective in destroying a wide range of harmful bacteria, viruses, and fungi. Quats are economical and effectively control odors when used according to the manufacturer's directions. They can be used on sensitive floor surfaces and will not damage floor finishes.

**Pine oil cleaners** are all-purpose cleaners made from a natural resin distilled from pine trees. The pine oils are combined with alcohols and *quats* to improve their disinfecting and cleaning properties. Pine Sol is an example of a pine oil cleaner/disinfectant.

When mixed in water, pine oil cleaners do not dissolve, but instead make a milky soap. Most people like the way they smell and the fact that they can clean and deodorize at the same time. Overall, they are good cleaners. *Caution:* These cleaners are highly flammable. They can be very dangerous if swallowed or if the fumes are inhaled. Use with adequate ventilation and follow all

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labeled precautions. Do not use these products full-strength or leave them soaking on waxed or freshly painted surfaces.

The EPA provides a limited listing of 500 registered disinfectant products. It is updated periodically, yet it is not a complete listing. The list is available at <http://www.epa.gov/oppad001/influenza-a-product-list.pdf>

### Sanitizers for Household Use

**Sanitizers** are commonly used in restaurants and household products. A sanitizer is a product that reduces germs on surfaces to levels considered safe by public health codes or regulations. By EPA standards, these products must destroy 99.999% of pathogens within 30 seconds. Many sanitizers are a formulation of a detergent and disinfectant. Sanitizers can be used on food contact surfaces, such as dishes, eating utensils, and cutting boards. Pacifiers and toys that children may place in their mouths can be sanitized for safety.

By killing bacteria, sanitizers also destroy odors. These products are used when cleaning tubs, showers, toilet bowls, bathroom sinks, and ceramic or plastic bathroom tile. They are also used in laundering and dishwashing products. Often, household products sold as disinfectants are also effective as sanitizers. Household products that are effective sanitizers include bleach and products formulated with quats, such as pine oil cleaners.

The EPA recommends that EPA-registered products be used whenever possible. Only a disinfectant or sanitizer with an EPA registration number on the label can make public health claims that they are effective in destroying germs.

### ABRASIVES

Abrasives are rough or gritty. They clean surfaces by creating friction that lifts off hardened food particles, grease, tarnish, and stains. Anything that is rough to the touch can be considered an abrasive when used to remove spots or stains from a surface. Types of abrasives include physical, mineral, and chemical.

- **Physical abrasives** include sandpaper, plastic and nylon meshes, scrubbing pads, and steel wool.
- **Mineral abrasives** are composed of particles. Baking soda, powdered borax, and salt are all examples of mineral abrasives that are considered natural cleaners.
- **Chemical abrasives** are also composed of particles. A common chemical used in commercial products that contain bleach is sodium dichloro-s-triazinetrione. These cleaners are often referred

to as **scouring powders** and are used to kill bacteria in addition to general surface cleaning.

In household cleaning products, mineral and chemical abrasives are available in powder and cream (or thick liquid) forms. Generally, the larger the particles used in the product, the harsher the cleaner. Calcium carbonate (or calcite) and silica are two types of minerals often found in these products. Calcium carbonate is the mildest of abrasives, with the finest abrasive found in the cream form.

### Uses

**Mild abrasives** are appropriate for surfaces such as fiberglass, laminate, countertops, grout, tile, sinks, tubs, cookware, and glass.

**Coarse or harsh abrasives** can be used to clean outdoor stainless steel grills, oven baking racks, and cement. Usually sold for removing tough stains, harsh abrasives will cause damage to many surfaces. Regular use may scratch the shiny finishes of sinks, bathtubs, and kitchen appliances, making them dull and rough. When surfaces are damaged in this way, they soil faster and stain deeper. It will then be necessary to continue to use a harsh abrasive to remove embedded dirt and stains.

### Caution

Always check the manufacturer's directions before using abrasives on any surface. Consumers should be aware that all abrasives can leave scratch marks on some surfaces. Use sparingly when cleaning aluminum, plastic, plated and highly polished metals, and appliance enamel on refrigerators, dishwashers, oven doors, and microwave ovens.

### ACIDS

Acids are used to remove mineral deposits, rust stains, and hard water deposits. They can remove discoloration from some metals, such as aluminum, brass, bronze, and copper. Some acids are effective both in cleaning and disinfecting surfaces.

Acids range from very mild to very strong. Consumers must take care when choosing and using acids for cleaning. Acid-based disinfectant cleaners are very irritating to your eyes and skin and will burn your throat. When using toilet cleaners, it's a good idea to wear latex dishwashing gloves to help protect your skin and safety goggles to help protect your eyes from splashes.

This section provides an overview of types of cleaning products that contain acids as well as best use practices. As always, read the manufacturer's directions before using on any surface. Refer to Table 1 for examples of acids in household cleaners.

**Table 1. Examples of Acids in Household Cleaners**

Product	Acid Ingredients
Toilet bowl cleaner	sodium bisulfate, oxalic acid, dilute hydrochloric acid, or dilute sulfuric acid
Rust removers	acetic, citric, gluconic, levulinic, hydrofluoric, hydroxyacetic (glycolic), or oxalic acids
Metal cleaners	citric or acetic acids
Hard water removers	levulinic, acetic, hydroxyacetic (glycolic), citric, or gluconic acids
Tarnish removers	levulinic, acetic, hydroxyacetic (glycolic), citric, or gluconic acids

## Uses

### Very Mild Acids

Mildly acidic cleaners are used to dissolve hard water deposits, remove mild rust stains, and eliminate soap film from around the sink and on shower doors. They are useful in removing tarnish from brass and copper.

Mildly acidic cleaning products include vinegar (acetic acid) and lemon juice (citric acid). Mild cleaners made from these acids are safe for use around children and pets. Other acids are often found in household cleaning products.

- Gluconic acid – organic compound with very low toxicity
- Hydroxyacetic (or glycolic) acid – a mild organic acid (stronger than vinegar)
- Levulinic acid – a non-toxic sugar-derived chemical used as a platform chemical in the production of a number of products

**Acetic acid** is the acid in clear white vinegar and is a natural all-purpose cleaning agent. It is best for general household cleaning on surfaces that can tolerate a strong, acidic product. Vinegar removes hard water deposits from glassware, rust stains from sinks, and tarnish from brass and copper. After using alkaline cleaners, acetic acid can be used as a mild delimiting rinsing agent. Although vinegar is widely used as a disinfectant in household cleaning, the packaging cannot claim the product as a disinfectant because it is not registered with the EPA.

**Citric acid** is a natural substance found in lemons, limes, oranges, and grapefruits. It is nontoxic, antibacterial, and antiseptic. It has much the same use as vinegar.

In commercial products, citric acid is used to remove

hard water buildup on dishes and glassware. It is also used as an acid spotter to remove coffee and tea stains, yellowing/browning discolorations, water stains, and urine or feces stains. Some commercial products that contain citric acid are water-based and may cause corrosion or rust on metals. Wash and dry the metal after cleaning to prevent rust.

**Cream of tartar** is a very mild acid salt. Made into a paste with water, it can be used to clean brass and copper, brighten aluminum, remove rust, and freshen coffee makers. Mix a small amount with vinegar to create a nonabrasive cleaner for use on grout, mold and mildew, oven tops, and cookware.

**Phosphoric acid** is a clear, colorless, odorless liquid. It is very mild, yet more acidic than vinegar or lemon juice. Commonly used for rust removal, it works quite well on most types of bathroom stains. In commercial products, phosphoric acid is found in tub, tile, sink, and toilet bowl cleaners.

### Very Strong Acids

Strongly acidic cleaners are highly toxic. They may be corrosive, meaning they can eat away at metal surfaces or human tissue. Avoid getting them on your skin or in your eyes. Avoid getting them on other materials since the acids may have bleaching effects, eat through metals, or etch (scratch) surfaces and porcelain enamel. Always read the labels on the products you buy and follow the directions to ensure your own safety. See the *Caution* section (at the end of this *ACIDS* section) for more information on safe use.

**Hydrochloric acid** comes from a mixture of common table salt and sulfuric acid. Concentrated solutions of hydrochloric acid are extremely corrosive. Diluted solutions are commonly found in household cleaning products. Very dilute solutions are only mildly corrosive. When using hydrochloric acid, be careful to not let the cleaner come in contact with eyes and skin.

Hydrochloric acid is used in toilet bowl cleaners to remove dirt and grime. It is used for cleaning mortar spills off new bricks, removing rust from metals and other surfaces, and etching floors before sealing them. This product eats cotton, rayon, and mortar and is very corrosive to metals. In commercial products, hydrochloric acid is also called muriatic acid and is used for cleaning concrete; the acid cleans the concrete by etching away the top layer.

**Hydrofluoric acid** is a commercial rust remover that will burn the skin. Keep this one away from glass windows or glass products. See the *Caution* section before using.

**Oxalic acid** is a bleaching agent that is an effective rust remover. It is poisonous and corrosive. Make sure to keep children and pets away while using this

product. Dispose of cloths and brushes used to apply oxalic acid. Otherwise, the acid could be transferred to kitchen utensils and dishes, from which this poisonous substance could be ingested. See the *Caution* section before using.

**Sodium bisulfate** (also known as sodium acid sulfate) can be found in toilet bowl cleaners. It is a compound made by combining sodium, hydrogen, sulfur, and oxygen ions. It is a **poison** and should be used with extreme caution. See the *Caution* section before using.

**Sodium hypochlorite** is a chemical used in bleaching solutions, disinfectants, water purifiers, and cleaning products. As a disinfectant, it attacks and destroys bacteria, viruses, and mold. It can be found in toilet bowl cleaners and tile and grout cleaners, among other products. Swallowing sodium hypochlorite can lead to poisoning. Breathing the fumes may also cause poisoning, especially if the product is mixed with ammonia.

**Sulfuric acid** is a strong drain cleaner and can be found in some toilet bowl cleaners. It also is a powerful oxidizer. However, it attacks nylon, vinyl, and most organic substances. It will burn the skin and emit dangerous fumes. Be sure to use it with caution. Store in a safe place away from other chemicals or heat, and definitely keep it away from children or pets. See the *Caution* section before using.

### Caution

Always read the labels on the products you buy and follow the directions to ensure your own safety.

Oxalic acid, hydrochloric acid, sodium bisulfate, sodium hypochlorite, and sulfuric acid are all **poisonous**. They can also injure skin and eyes and damage clothing, leather, and some metals. Damage can occur when two or more different kinds of metals are treated together with acid. For this reason, avoid soaking a metal in a container made of another metal.

**Never** mix a toilet bowl cleaner with any other household or cleaning products. Doing so can result in poisonous gasses being released and cause very serious breathing problems. When cleaning your bathrooms, always be sure that the room has plenty of ventilation. Leave the door open, open a window, and use the exhaust fan, if you have one.

## ALKALIS

Alkaline cleaners are composed of alkali salts, such as sodium bicarbonate (baking soda), sodium carbonate (also known as washing soda or soda ash), sodium metasilicate, and trisodium phosphate (TSP). Along with their detergent properties, certain alkali salts have water-softening characteristics and are used in cleaning products for that purpose.

Cleaning products are available in soaps, detergents, and all-purpose cleaners. Alkalis help clean food spills, oils, grease, and everyday things that get dirty. They remove oily dirt without rubbing and vary in strength from mild to moderate to strong. Refer to Table 2 for examples of alkalis found in household cleaners.

**Table 2. Examples of Alkalis in Household Cleaners**

Product	Alkali Ingredients
All-purpose cleaners Examples: 409, Ajax, Borax (20 Mule Team), Clorox OxiMagic, Mr. Clean, Spic and Span	Ammonium compounds, sodium bicarbonate (baking soda), sodium carbonate, sodium metasilicate, trisodium phosphate (TSP), sodium borate (borax)
Drain cleaners	Caustic soda/sodium hydroxide (lye)
Oven cleaners	Caustic soda/sodium hydroxide (lye), ammonia
Scouring powders	Alkali salts, sodium metasilicate, trisodium phosphate (TSP)
Window cleaners	Ammonia or ammonium compounds, sodium bicarbonate (baking soda)

## Uses

### Mild Alkalis

For the most part, household cleaning chemicals listed in the mild alkali category are ones that contain sodium bicarbonate (baking soda). Mixed with water, this solution is used on areas that require a mild cleaning. It safely cleans glass, wall tile, and porcelain enamels. It also removes coffee and tea stains from china and plastic dishes. Mild alkalis are not corrosive. They are safe to use around children and pets.

### Moderate Alkalis

**Ammonia** is a strong, colorless gas. When the gas is dissolved in water it is called liquid ammonia.

Ammonia is added to a number of household and commercial cleaners to boost their alkalinity and grease-cutting ability. It dries clear and usually won't streak. Ammonia also is found in glass cleaners and in cleaners used for shiny surfaces, like wax cleaners. Too much of it can ruin or damage some surfaces, so use it with caution.

An effective cleaning agent, ammonia's odor is the main deterrent to its use. Never mix ammonia with chlorine and bleach products because this can release a highly toxic gas. For that matter, never mix any kind of chemicals since this can cause an unstable reaction and perhaps fumes, fire, or volatility (explosions).

- **Household ammonia**—containing 5 to 10% ammonia gas in water—cleans kitchen range burners, ovens, windows, and mirrors.
- **Sudsy ammonia** has soap or detergent added. Sudsy ammonia cleans garbage pails, kitchen range burners, and sinks.

**Borax**, also known as sodium borate, is a natural mineral compound. In the home, borax is used as a natural laundry booster; multipurpose cleaner for woodwork, walls, sinks, and carpets; deodorizer; and disinfectant. Borax is not flammable. It is not reactive and so can be mixed with most other cleaning agents, including chlorine bleach. It dissolves best in warm water. Borax is toxic if swallowed in large doses, and medical attention should be sought immediately if this occurs.

### Strong Alkalis

A cleaner that fits in the strong alkali category destroys bacteria and dissolves proteins.

Cleaning products such as oven cleaner, lye, and drain cleaners are strong alkalis. They are highly corrosive and cause chemical burns on the skin and in the lungs when inhaled.

**Lye** (also known as caustic soda or sodium hydroxide) is sometimes found in drain and oven cleaners. These types of cleaners are used to unclog sink drains or in the bathroom. They should not be stored in the kitchen or bathroom cabinets. Lye emits dangerous fumes and can cause skin burns—and in some cases blindness—if the fumes come in contact with your eyes. Products with lye can cause death if swallowed. Wear gloves and safety goggles when using these products. Also, make sure that there is good ventilation in the room when these cleaners are used.

**Sodium carbonate** (also known as washing soda or soda ash) is used as a building block for powdered detergents and washing soda. It is used to remove fat from drains, greasy burners, and pans. This type of cleaner is slightly corrosive and will burn skin and corrode aluminum products.

**Sodium metasilicate** is mixed with water to form a cleaning solution. It makes a highly effective cleaner that can remove dirt and marks from walls in preparation for painting, and can attack stubborn soils on siding when cleaning the exterior of a home.

**Caution:** Sodium metasilicate is highly alkaline. Dust from the powder can irritate the nose, eyes, and lungs. Prolonged exposure can cause skin irritation. Wear protective gloves, eye protection, and long-sleeved shirts and pants while using this product. Wear a dust mask while mixing the powder with water if dust irritates nasal passages.

Store the compound in original containers in a dry location. Sodium metasilicate is highly poisonous when ingested. Store it out of reach of children or pets.

**Trisodium phosphate (TSP)** is not commonly found in products because most phosphates have been phased out of cleaning products due to environmental concerns. Products that do contain TSP are banned or restricted use in many states.

### Caution

Most alkalis are toxic (poisonous), some are corrosive, and others irritate skin and eyes. Lye can burn skin severely. Alkalis remove oil from skin, so wear gloves. They also take oil from linoleum and oil-based paints and often result in cracking or peeling. They can darken aluminum. Damage to surfaces can be prevented by using a mildly alkaline solution and by rinsing well to remove all the cleaner.

## BLEACHING AGENTS

Bleaching agents are chemicals used to remove stains. Many bleaching agents can be used as disinfectants. If a product contains a bleaching agent, the product information label may state *contains bleach*, *bleaches as it cleans*, or *chlorinated*.

**Bleaching agents** may not list the term bleach on the product label. Therefore, it is important for consumers to recognize other names for bleach. Table 3 provides a list of possible chemical bleaching agents that may appear on product labels.

**Table 3. Chemical Bleaching Agents Found on Product Labels**

Chemical	Use In Cleaning Products
Calcium hypochlorite	Solid bleach used in sanitizing.
Hydrogen peroxide	Bleaching textiles and fur.
Sodium carbonate peroxide (or, sodium percarbonate)	Oxygen-based bleaching agent. Releases hydrogen peroxide when dissolved in water. Whitens, brightens, and removes dirt and stains from surfaces and fabrics.
Sodium dichloroisocyanurate	Sanitizing and dishwashing agents.
Sodium hypochlorite	Household laundering and sanitizing.
Sodium perborate	Milder bleach for laundering and replacement for phosphates in detergents.



**Figure 1.** A bottle of commercially available liquid chlorine bleach.

**Chlorine bleach** is one of the most widely available and affordable disinfectants on earth. Liquid chlorine bleach (Figure 1) is an alkaline solution of sodium hypochlorite dissolved in water. It is a base and is especially good at removing stains and dyes from textiles. Additionally, chlorine bleaches are used for controlling mold and mildew and for disinfecting surfaces.

**Caution**

Chlorine bleach is a strong corrosive material. Inhaling the fumes will irritate the eyes, skin, and respiratory tract. Never mix bleach with toilet bowl cleaners or rust remover because a poisonous gas is produced. Never mix bleach and ammonia because this produces a dangerous chemical compound that could result in fire.

Consumers should be aware that chlorine bleach can dull shiny finishes on sinks, bathtubs, and other porcelain enamel faces. Since it is an alkali, bleach will darken aluminum and make linoleum brittle.

**DETERGENTS**

Detergents are an ingredient found in many home cleaning products. A detergent is a chemical substance used to break up and remove grease and grime. Soap is an example of one kind of detergent. The most important ingredients in detergents are chemicals called surfactants—a word made from bits of the words “surface active agents.” Since water does not clean effectively alone, detergents help loosen dirt. The surfactants in the detergents are used to bond water to dirt and grease. They help water to get a hold of the grime, break it up, and wash it away.

Builders enhance the detergent’s efficiency. Phosphates are a type of builder commonly found in detergent products. Trisodium phosphate (TSP) and disodium phosphate are rarely used these days due to bans enacted for environmental reasons. Most phosphates in use today, referred to as *complex* or *condensed phosphates*, have a lower alkalinity than the banned phosphates. If a complex phosphate builder has been added, the detergent will remove oily dirt better. When a builder is present, the product is labeled *heavy duty* or *all-purpose*.

Some laundry detergents may be used for house cleaning jobs. The safety of a laundry detergent depends on the brand and the additional chemicals it may contain. Check the product label carefully. Liquid dishwashing detergent is safe for use around children and pets.

**SPIRIT SOLVENTS**

Solvents are cleaning chemicals that dissolve grease, oil, and oily dirt. The ingredients in solvents include (but are not limited to) acetones, denatured alcohols, and mineral spirits. Cleaners that contain solvents include spot removers, rug cleaners, sanitizers, drain cleaners, and all-purpose cleaners. Examples of spirit solvents are paint thinners, turpentine, and kerosene.

Many waxes and polishes for furniture and floors and floor wax removers contain spirit solvents. Spirit solvent floor wax removers are safe and effective for use on wood, wood composite, cork, magnesite, linoleum, concrete, and stone floors. They are used for removing wax, oil, and grease. These products are non-flammable.

**Note:** Spirit solvent floor waxes are not to be used on asphalt, thermoplastic tiles, PVC (vinyl), or rubber floors because the solvents will damage these types of floors.

Not all floor waxes contain spirit solvents. Some are water-emulsion waxes that will damage wood and cork products. Water-emulsion waxes can be recognized by the product label statement *Keep from Freezing*.

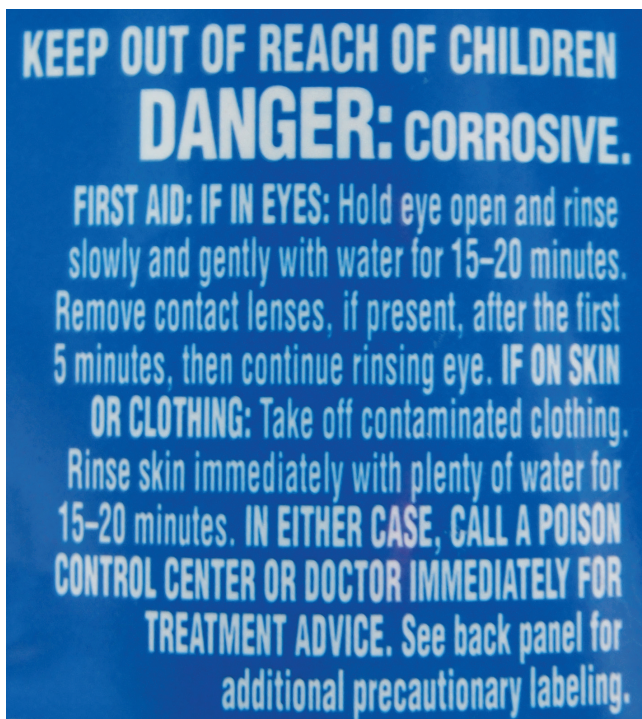


Figure 2. Warning label on household cleaning product.

#### Caution

Most spirit solvents are flammable and must be kept away from heat, sparks, and open flame. By law, the label must indicate that the product is flammable.

**Before using, read product labels and follow all recommended safety precautions.**

If solvent is spilled on clothing, don't wear it near a heat source because the clothing is flammable and serious burns may occur. Be careful when disposing of empty solvent containers, especially aerosol cans. Even a small amount of solvent left in the container can ignite and cause an explosion if the canister is left in a warm place or in direct sunlight.

#### SAFE HANDLING OF CLEANING PRODUCTS

Most cleaning products used in homes today are considered safe when used according to the manufacturer's instructions. Regulations require that all hazardous substances be labeled with the statement *Keep Out of the Reach of Children* (Figure 2). Not all products are hazardous, but when directions are not followed some of these products become dangerous—and some are more dangerous than others.

The most frequent misuse is accidental swallowing by curious children (Figure 3). Therefore, **never transfer cleaners into soft drink bottles or other containers that may seem harmless to children.** Keep cleaning



Figure 3. Installing childproof latches on cabinets can prevent children from opening them and possibly ingesting dangerous chemicals. Photograph by Thomas E. Tamayo.

products in the original packaging. Buy products in childproof containers and store them in cabinets with childproof latches.

Many household cleaners are stored under the kitchen sink in cabinets that are not locked. This is the **worst** place to store household cleaners. If this is the only place where you can store cleaning products, put safety latches (Figure 4) on the cabinets and drawers. The best practice is to put these products in a place that children cannot reach. Also, if possible, keep children and pets out of areas where cleaning products being used.

Keep products, such as strong acids and alkalis, directed away from skin and eyes when in use. Wear protective clothing, including gloves, safety goggles, and an apron. Immediately wash off any products that you splash or spill on your skin.

Products containing flammable liquids should never be used near open flames, including pilot lights on kitchen ranges or gas clothes dryers, furnaces, or lit cigarettes.

Do not leave aerosol (pressurized) containers on a kitchen range, radiator, or furnace; in direct sunlight; or near other heat sources. Never puncture aerosol containers. Before discarding this type of container,



**Figure 4.** A childproof safety latch on a cabinet door.

hold the valve open until all the contents and gas have escaped.

Never discard an empty aerosol container in a fire or incinerator because some gas usually remains. This is true even in an apparently empty can. Heat causes the gas to expand, which may lead to an explosion.

### Accidents - What To Do

If an accident occurs while you are using a hazardous substance, refer to the product label for the appropriate first aid procedures. Follow the directions carefully. If it is necessary to take a child or adult to the hospital or a physician's office because of an accident, be sure to bring along the container of the product that caused the injury. The information on the label will help the physician give prompt and proper treatment.

If no other person is close by and you are hurt or starting to feel sick, then do the following.

- **Household chemical splashed in the eyes.** Rinse out your eyes for 15 to 20 minutes in the shower or under a faucet. Then call your poison control center at **1-800-222-1222**. You can also call 911 or your local emergency ambulance number.
- **Household chemical splashed on the skin.** Take off the wet clothing and rinse the skin for 15 to 20 minutes in the shower or under a faucet. Then call your poison control center at **1-800-222-1222**.

You can also call 911 or your local emergency ambulance number.

- **Household chemical swallowed.** First, drink a half glass of water. Then call your poison control center at **1-800-222-1222**. You can also call 911 or your local emergency ambulance number.
- **Poisonous gas inhaled.** Quickly get to fresh air. If any other person is around, they should not breathe the fumes. If you can, open all the doors and windows wide. If not, stay in the fresh air. Call your poison control center at **1-800-222-1222**. You can also call 911 or your local emergency ambulance number.

Be prepared for any emergency in your home. Keep your local emergency number, local ambulance number, and the local poison control center telephone numbers on or next to your phone. All poison control centers now have the same telephone number—it doesn't matter which state you live in. The number is **1-800-222-1222**.

For more information on use and disposal of household chemicals, see Cooperative Extension Service Guide G-312, *Safe Use and Disposal of Household Chemicals* (available from [http://aces.nmsu.edu/pubs/\\_g/g-312.pdf](http://aces.nmsu.edu/pubs/_g/g-312.pdf)), and Guide G-313, *Household Hazardous Waste* (available from [http://aces.nmsu.edu/pubs/\\_g/G-313.pdf](http://aces.nmsu.edu/pubs/_g/G-313.pdf)).

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