



Alternative Less Toxic Cleaners

Toxic Substances	Non-toxic Alternatives/Safe Use
Air fresheners	Leave open boxes of baking soda in refrigerator, closet, and bathroom.
	Set out white vinegar in open dishes to destroy odors.
Sink Disposal Odors	Grind used lemons in the disposal.
Deodorizers	For carpets, mix 1 part borax to 2 parts cornmeal; sprinkle liberally on carpet and vacuum up after 1 hour.
Surface Cleaners	Mix 1-quart warm water, 1-teaspoon mild liquid dishwashing soap, 1-teaspoon borax or TSP, and a squeeze of lemon or splash of vinegar.
	Mix 1/2-cup vinegar and 1-quart of warm water.
	Dissolve baking soda in water for a general cleaner.
Detergents	Always use mild biodegradable detergents. Look for naturally derived or glycerine-based soaps.
Drain Openers	Use a plunger followed by a handful of baking soda and 1/2cup of vinegar; cover drain and let sit for 15 minutes; rinse with 2-quarts of boiling water.
Glass Cleaner	Combine 1-quart of water with 1/4 to 1/2 cup white vinegar, 1- to 2-teaspoons of lemon juice or 1- to 2-tablespoons of rubbing alcohol; spray on surfaces and wipe clean with soft lint free cloth.
Oven Cleaners	Mix 2-tablespoons liquid soap, 2-teaspoons borax, and 1-quart of warm water; leave on oven for 20 minutes then scrub with a non-chlorinated scouring powder.
Mildew Cleaner	To clean mildew from a shower curtain, machine wash with 1/2-cup soap and 1/2-cup baking soda; add 1-cup white vinegar to the rinse cycle.
Upholstery, Rug, and Carpet Cleaners	Mix 1-quart warm water, 1-teaspoon mild liquid soap, 1-teaspoon borax or TSP, and a squeeze of lemon or splash of vinegar; apply with a damp cloth or sponge and rub gently; wipe with a clean cloth and allow to dry.



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Scouring Powders	Use baking soda or salt.
Toilet Bowl Cleaners	Scrub with a solution of 1/2-cup borax in 1-gallon water for cleaning/disinfecting.
Tub/Tile Cleaner	To clean grout, combine 3-cups of baking soda and 1-cup warm water and scrub into the grout; rinse well with water.
Shower Mold Cleaner	To prevent or kill mold, mix 1 drop of tea tree oil per 1 cup of water and apply with a sponge.
Fabric Softener	To freshen and soften clothes, and 1-cup vinegar or 1/4-cup cup baking soda during final rinse.
Floor Polish/Wax	To clean vinyl floors, combine 1/4-cup TSP, 1/4-cup borax, or 1/2-cup white vinegar with 1-gallon warm water and apply with mop to remove dull greasy film.
	Wood floors sealed with polyurethane can be cleaned with 1/4-cup white vinegar added to 1-gallon water; dry immediately.
Metal Polishes	To polish brass and copper, use a lemon juice and salt paste.
	To polish silver:(1) Soak silver about 5 minutes in 1-quart warm water containing 1-teaspoon baking soda, 1-teaspoon salt, and a piece of aluminum foil. (2) Rub with toothpaste or baking soda and a soft cloth, rinse and polish dry.
	To polish chrome: (1) Wipe with apple cider vinegar, rinse with water, then dry. (2) Shine chrome fixtures with baby oil and a soft cloth, a piece of aluminum foil (shiny side out), or newspaper (wear gloves).
Shoe Polish	Avoid products containing trichloroethylene, methylechloride, nitrobenzene, and mineral spirits
DO NOT THROW IN TRASH	Call Household Hazardous Waste Hotline, (650) 363-4718 to dispose of waste.



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PRECAUTIONS:

For the most part, the homemade recipes listed here pose fewer threats to your health and the environment than the household chemicals they are intended to replace. However, it is important to note that many of the ingredients recommended are still considered chemicals, and should be treated as such. For this reason, appropriate precautions are included for some of these products that have been studied*. For more information on the studies done on these alternative products, see www.greenconsumer.cc

Baking Soda can be used as a mild abrasive cleaner. It is an alternative to chlorine or silica-based scouring products, which can have harmful effects on humans and animals. Research indicates that baking soda is an effective cleaner. Although published research regarding the environmental effects of baking soda is not available, common sense and years of widespread public use as a food item indicate that its environmental effects are negligible. **It's important to note that baking soda can be slightly toxic if swallowed in large amounts (2-3 tablespoons for infants, 4-5 tablespoons for children, and 15-20 tablespoons for adults). Due to the potential for minor skin irritation, gloves should be worn to protect sensitive skin.**

Borax can be used as a general purpose cleaner. It is considered an effective alternative to chlorine or silica-based scouring products, which can have harmful effects on humans and animals. Although Borax is generally much safer than chlorine or silica-based products, it should be used with some caution. Studies indicate it is a potential reproductive toxin for humans, fish, frogs, and other animals that live in water, and it has been shown to be toxic to embryos and early post-hatch stages of some aquatic species. Also, the use of borax may increase boron levels in sewage discharge, which is a problem for some communities. **Ingesting more than one teaspoon (children) or five teaspoons (adults) may cause vomiting, diarrhea, seizures and even death. As with all household cleaners, Borax should be kept out of the reach of children. Wear gloves to avoid skin contact, and avoid inhaling borax dust.**

Vinegar is used as a general-purpose cleaner, hard surface cleaner, and glass cleaner. It is an alternative to ammonia-based cleaners and other corrosive products. Research indicates that using just vinegar did not prove to be a highly effective general purpose cleaner. Additionally, no scientific information is available regarding vinegar's effectiveness as a window cleaner, although it has been used widely for this purpose. Common sense and years of widespread public use of vinegar as a food item indicate that the environmental effects of vinegar are negligible. **It is also a mild to moderate eye irritant.**

* Only single compound alternatives were selected for evaluation. There are few existing health and environmental studies on homemade alternative mixtures.