

LESS-TOXIC ALTERNATIVES TO COMMON HAZARDOUS HOUSEHOLD PRODUCTS

AIR FRESHENERS/DEODORIZERS

- Leave open boxes of baking soda in refrigerator, closets and bathrooms.
- Saturate cotton ball with pure vanilla; place on a saucer in refrigerator or car.
- Set out white vinegar in open dishes to destroy odors.
- Set out potpourri or fresh oranges with cloves in open dishes.
- Simmer cinnamon and cloves.
- Burn scented candles.
- To clean garbage disposals, grind used lemons in the disposal or pour in baking soda.
- For carpets, mix 1 part borax to 2 parts cornmeal; sprinkle liberally on carpet and vacuum after an hour.
- Sprinkle baking soda in the bottom of cat box before adding kitty litter.
- Sprinkle baking soda in the bottom of garbage cans to control odors.

CLEANERS

- Mix vinegar with salt and water for a good surface cleaner.
- Dissolve baking soda in water for a general cleaner.
- For washing dishes by hand, use ½ cup baking soda with a mild dishwashing liquid to help cut grease and food.
- For automatic dishwashers, choose a detergent with the lowest phosphate content listed on the package.
- Wash painted wood with 1 teaspoon of sodium carbonate, or washing soda, in 1 gallon of hot water. Rinse with clear water.
- Clean coffee pot surfaces with a mixture of warm water and baking soda or vinegar.
- Clean the interior of coffee pots with white vinegar according to manufacturer's directions.
- As a disinfectant, use ½ cup borax in 1 gallon of hot water. To inhibit mold and mildew, do not rinse off borax mixture.
- Always use mild, biodegradable detergents. Look for naturally derived or glycerine-based soaps.

Glass Cleaners

- Combine a quart of water with ¼ to ½ cup of white vinegar, 1 to 2 tablespoons of lemon juice or 1 to 2 tablespoons of rubbing alcohol; spray on surfaces and wipe clean with soft, lint-free cloth.
- Combine juice from 1 lemon, 2 cups water or club soda, 1 teaspoon cornstarch, ½ teaspoon peppermint essential oil (optional); shake well and spray on windows.
- Dip glassware and crystal into water mixed with a splash of vinegar and dry with lint-free dishcloth.

Oven Cleaners

- Use a non-aerosol oven cleaner that does not contain lye.
- Sprinkle salt on spills when they are warm, and then scrub.
- Mix 2 tablespoons liquid soap, 2 tablespoons borax and 1 quart of warm water; leave on oven for 20 minutes then scrub with fine steel wool or a non-chlorinated scouring powder.
- Mix equal parts of castile soap, borax and water. Let mixture set for 20 minutes and scrub with mixture of baking soda and salt.
- Scrub spots with a baking soda, salt and water paste.
- Mix 3 tablespoons of washing soda with 1 quart warm water.
- Dip a wet sponge in baking soda to clean glass oven doors.
- Prevent spills by using oven liners (such as foil), or trays.

Mildew Cleaners

- Scrub mildew spots with baking soda or borax, or sponge with white vinegar.
- Scrub area with a paste of lemon juice or white vinegar and salt.
- To clean mildew from a shower curtain, machine wash with ½ cup soap and ½ cup baking soda; add 1 cup white vinegar to rinse cycle.

Upholstery, Rug and Carpet Cleaners

- Use a non-aerosol, soap-based cleaner.
- Clean spills immediately with club soda.
- Mix 1 quart water, 1 teaspoon mild liquid soap, 1 teaspoon borax or TSP (trisodium phosphate) product and a squeeze of lemon juice or splash of vinegar; apply with a damp cloth or sponge and rub gently; wipe with a clean cloth and allow to dry.
- Mix 4 cups water, 1 cup white vinegar, 3 tablespoons sodium lauryl sulfate, 2 tablespoons baking soda, 1/8 teaspoon lavender essential oil (optional), 1/8 teaspoon ginger essential oil (optional); shake mixture vigorously and shampoo using small circular motions; scrub sudsy area well.
- To clean red wine spills, rub a thick layer of salt on the spill, and then sponge up after the spill has been absorbed.

Scouring Powders

- Use baking soda or salt.
- Use a non-chlorinated commercial scouring powder.
- Use a non-chlorinated scouring powder with a nylon scouring pad or fine steel wool as a kitchen degreaser; sprinkle baking soda, add juice of ½ lemon and scrub.

Toilet Bowl Cleaners

- Scrub with a solution of ½ cup borax in 1 gallon of water for cleaning and disinfecting.
- Clean frequently with a solution of baking soda and water; sprinkle baking soda around rim; scrub with toilet brush as needed.
- Mix ½ teaspoon sodium lauryl sulfate, 2 tablespoons baking soda, 2 tablespoons vinegar, 1 teaspoon orange essential oil (optional), 2 cups water; vinegar and baking soda will foam when mixed, let stand for 10 minutes before use as spray.

- To remove lime deposits, pour full strength white vinegar in the bowl, let sit for several hours then scrub with sturdy brush.

Tub and Tile Cleaners

- Use a non-chlorinated scouring powder or baking soda.
- To clean grout, combine 3 cups of baking soda and 1 cup warm water and scrub into grout; rinse well with water.
- Use ½ cup borax to 1 gallon of hot water for cleaning and as disinfectant.
- To clean soap film of fiberglass surfaces, apply baking soda with a damp cloth, rub and rinse off residue well.
- To clean shower-door tracks, pour full-strength vinegar into the track, let soak for a few minutes and rinse.
- Scrub tub and sink stains with a paste made from cream of tartar and hydrogen peroxide.

DRAIN OPENERS

- To unclog a drain, pour ¼ cup of baking soda down the drain, followed by ½ cup of white vinegar. Let sit for a few minutes, then pour a kettle of boiling water down the drain to flush.
- Pour ¼ cup of salt down the drain, followed by boiling water, to help keep drains unclogged.
- Pouring boiling water down the drain once a week can keep it from getting blocked.
- To prevent clogged drains, always use a drain strainer.
- Use a mechanical snake or plunger to unclog a drain.

LAUNDRY PRODUCTS

Bleach

- Use non-chlorine dry bleach or washing soda to whiten clothes.
- Use ½ cup borax per load of laundry to whiten and brighten colors and to remove spots.
- Reduce bleach in half and add ¼ to ½ cup baking soda per load.

Detergent

- Use a synthetic detergent without adding fabric softeners or bleach.
- Use products that contain washing soda. Washing soda brightens fabrics and costs less than bleach.
- Mix ¼ cup clay powder, 1-3 tablespoons of essential oil of choice (optional), 13 cups borax, 12 cups baking soda, 4 cups sodium lauryl sulfate; mix well in bucket and use 1/8 cup of laundry powder per load.

Fabric Softener

- To freshen and soften clothes, add a cup of vinegar or ¼ baking soda during final rinse.
- To reduce “static cling” in synthetics due to tumble-drying, dampen hands when folding.
- Use non-perfumed fabric softener sheets rather than liquid fabric softener.

Presoak

- Soak heavily soiled items in warm water with ½ cup washing soda for 30 minutes.
- Rub soiled areas with mild liquid soap.

Spot and Stain Removers

- Dissolve ¼ cup borax into 2 cups cold water; sponge on and let sit until dry then wash with soap and water to completely remove spot. Works well on blood, chocolate, coffee, mildew, mud and urine.
- To remove bloodstains: (1) Immediately clean stain with club soda or sponge with cold water; dry with towel and repeat if needed. (2) Rub with cornstarch or cornmeal and water paste; let dry in sun; brush off. (3) If stain persists after cleaning with soda or cold water, then pour hydrogen peroxide directly on stain; rinse with water and wash as usual or apply mixture of ¼ cup borax and 2 cups cold water, rinse and wash.
- To remove grease: (1) Apply paste of cornstarch and water; let dry then brush off. (2) Cover with baking soda or cornmeal; let dry and brush off. (3) Sponge spot on suede with a cloth dipped in white vinegar; let dry and brush off. (4) Scrub spot with toothpaste.
- To remove ballpoint ink, sponge with rubbing alcohol, rub with soap, then rinse and wash.
- To remove lipstick, rub with cold cream or shortening to dissolve color; rinse area with solution of washing soda and warm water to remove grease; wash in soapy water as hot as fabric will stand.
- To remove perspiration stains, sponge stain with a weak solution of white vinegar or lemon juice and water.
- To remove rust stains, moisten spot with lemon juice, sprinkle with salt and expose to sunlight. To remove rust from whites, cover the stains with cream of tartar, gather up the ends of the article so the powder stays on the spot, dip the whole thing in hot water for 5 minutes, then wash as usual.
- Pour club soda on fresh spots and stains to remove wine and foods.
- To remove ink spots, put cream of tartar on stain and squeeze a few drops of lemon juice on top; rub into stain for one minute and brush off powder with a clean brush and then sponge immediately with warm water. Repeat if needed.

Spray Starch

- For regular fabrics, dissolve 2 tablespoons cornstarch in 1 pint of cold water; store in spray bottle and shake well before using.
- For delicate fabrics, dissolve a packaged unflavored gelatin in 2 cups hot water; store in spray bottle. To test solution, tip corner of fabric into solution; if fabric becomes very sticky when dry, add more water.

POLISHES

Floor Polish and Wax

- To clean vinyl floors, combine ¼ cup TSP, ¼ cup white vinegar with 1 gallon warm water and apply with mop to remove dull greasy film.
- To clean wood floors, damp mop with a mild vegetable oil soap; dry immediately.
- For painted or finished wood floors, combine 1 teaspoon washing soda and 1 gallon hot water; wash floors with a rag dampened with mixture; dry immediately.

- Wood floors sealed with polyurethane can be cleaned with $\frac{1}{4}$ cup white vinegar added to 1 gallon of water; dry immediately.

Furniture Polish

- Polish unfinished wood with mineral oil.
- To clean and polish finished wood: (1) Use a mild vegetable oil soap. (2) Combine 1 part lemon juice with 2 parts vegetable or olive oil and polish with a clean, soft cloth.
- Wash painted wood with 1 teaspoon washing soda in 1 gallon hot water; rinse with clear water.
- To polish dark wood, mix 1 teaspoon olive oil, juice of 1 lemon, 1 teaspoon brandy or whisky, and 1 teaspoon water; mix and apply with soft cloth. Must be made fresh each time.
- To polish oak furniture, boil 1 quart beer with 1 tablespoon sugar and 2 tablespoons beeswax; when cool, wipe mixture on wood, allow to dry and then polish with soft cloth.
- To remove a heat blemish or scratch, rub in mayonnaise, wipe off, and then buff with clean cloth.
- To remove water spots, apply equal parts non-gel toothpaste and baking soda with a soft, damp cloth; rinse out the cloth and wipe off any residue. When the finish is smooth, buff with a clean soft cloth then rub the spot with the meat of half a pecan to restore color and shine.

Metal Polishes

- To polish brass: (1) Use Worcestershire sauce or scrub with toothpaste. (2) Pour on tomato ketchup, let sit and wipe dry. (3) Use water in which onions have been boiled.
- To polish brass and copper, use a lemon juice and salt paste.
- To polish copper, pour white vinegar and salt over copper and rub.
- To polish silver: (1) Soak silver about 5 minutes in 1 quart of warm water containing 1 tablespoon baking soda, 1 tablespoon salt and a piece of aluminum foil. (2) Rub with toothpaste of 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 newspapers.

Shoe Polish

- Avoid products containing trichloroethylene, methyl chloride, nitrobenzene and mineral spirits.
- For leather shoes: (1) Apply olive oil, walnut oil or beeswax to shoes then buff with a chamois cloth. (2) Polish black or tan leather shoes with lemon juice then buff with a clean cloth. (3) To clean leather, rub equal parts of white vinegar and linseed oil into leather then buff with soft cloth.
- To shine and protect patent leather shoes, rub with a dab of petroleum jelly.
- To clean dirt marks from suede, rub with an art-gum eraser then buff lightly with sandpaper or an emery board.

PESTICIDES AND INSECT REPELLANTS

- To make a bug repellent for the body mix 2 tablespoons citronella essential oil, 2 tablespoons rosemary essential oil, 2 tablespoons geranium essential oil, 2 tablespoons eucalyptus essential oil, and ½ cup olive oil. Dab on clothing and skin, avoiding eyes and mouth.
- For an anti-insect spritzer, mix 2 cups vodka, 1 tablespoon citronella essential oil, 1 tablespoon eucalyptus essential oil, 1 tablespoon geranium essential oil, 1 tablespoon rosemary essential oil, 1 tablespoon orange essential oil, and 1 tablespoon lemon essential oil. Shake well and mist into air to keep bugs away.
- For an insect spray, dissolve 1 cup grated castile soap in 1 cup boiling water and set aside. In blender, pour 2 cups boiling water over 1 cup coarsely chopped tobacco leaves and let set for ten minutes. Add 1 entire bulb of chopped garlic and 1 cup fresh tansy (optional) and blend until smooth. Strain through cheesecloth and discard solid materials. Add castile soap to mixture and stir; pour into spray bottle. Spray on insects and their environs at early morning and dusk for three days in a row. Because this mix drives most bugs away, but does not kill them, apply as needed.
- For fruit trees, mix 4 jalapenos or habaneras, seeded and chopped, 2 cloves of garlic, 1 ½ quarts water, and 2 oz. beer. Cover and bring to boil for 5 minutes, then let the mixture steep in the pot for 24 hours. Add ½ cup vinegar, strain well and pour into sprayer. Spray leaves, but not blossoms; will help keep birds away.

Ants

- Trace a line of ants to find out where they are entering the house and then seal it off. You can also try pouring a barrier of any of the following at the place where ants enter the house: cinnamon, cream of tartar, red chili pepper, salt, dried mint, sage, or cucumber peelings. Also, try that old gift perfume you don't like. Some perfumes may kill or repel ants.
- For heavy ant infestations, mix 1 tablespoon sugar and 1 tablespoon borax with 2 tablespoons water to make a thick syrup. Soak cotton balls in mixture and place them on something flat so that ants can get to it. Place in the middle of the ant infestation. Ants will eat it and take it back to the nest. Slowly but surely, the numbers will diminish. Have patience and keep out of reach of children and pets.
- Attach bands of sticky, adhesive materials around base of plants and trees to deter ants, which can carry and colonize aphids. Ants like the sweet secretion of aphids and protect them from natural enemies.
- Border gardens with bone meal or diatomaceous earth.
- Mix 2 tablespoons boric acid, 2 tablespoons sugar and 1 cup water. Soak paper towels, place on dishes, and set out for ants. Keep away from children and pets.
- Mix 4 ounces of mint jelly with 2 level tablespoons of powdered boric acid. Cut small squares of masking tape and dab mixture on tape. Stick on floors behind cabinets and appliances. Take precautions for children and pets.

Aphids

- Some soap sprays are effective insecticides. They must be sprayed directly on the insect in order to penetrate its body. Mix 1 teaspoon liquid soap in 1 gallon water. Try different soaps; some may be more effective than others. Use on aphids, mealy bugs, whiteflies, earwigs and scales.
- Crush colonies on plant tips, or prune them off.
- Introduce ladybugs or lacewigs, natural enemies of aphids.
- Plant garlic, chives, petunias and nasturtiums around garden to repel aphids, but be aware that some plants (garlic, for instance) may inhibit the growth of certain vegetable plants.
- Mulch banana peels into the soil at the base of rose bushes. This will strengthen them and ward off disease-bearing aphids.

Earwigs

- Make rolls out of newspaper, soak them in water then set them out overnight. First thing in the morning the rolls will be full of earwigs. Put the rolls in a tightly sealed bag and take out with the trash. Keep at this for a while and you will be rid of your problem.
- Fill old tuna or pet food cans with ½ inch vegetable oil; place several cans around the infested area. When full, dump bodies into trash and refill.

Fleas

- As a first step, vacuum! Remove the vacuum bag and seal the “catch” in a tightly closed bag and dispose of it immediately.
- Flea preparations come in different formulas for use on you pet, in the house, or in the yard. Select products that contain two types of ingredients: low-toxic adult flea killers such as pyrethrins plus insect growth regulators (IGRs) to kill the flea eggs, larvae and pupae. Pyrethrins have a boosted effect in combination with a chemical enhancer such as piperonyl butoxide. Read the label for directions on use.
- Consult your veterinarian before choosing products, since pet tolerance for insecticides varies according to the species, age and skin condition of the pet.
- Select insecticides for the yard that are time-released for longer effect.
- Wash doghouses with salt water to help repel fleas. Scatter fresh pine needles or cedar shavings under your pet’s sleeping pad, and keep the bedding clean.
- To make a flea collar, mix 2 tablespoons peppermint essential oil, ½ cup plus 2 tablespoons rosemary essential oil, 2 tablespoons white cedar essential oil, ¼ cup citronella essential oil, 2 tablespoons eucalyptus essential oil. Soak a natural fiber rope in mixture and let dry for several hours before tying around pet’s neck.
- To make flea shampoo mix 2 cups boiling water and ½ cup sodium lauryl sulfate together until completely dissolved. Mix ¼ cup white vinegar, 2 tablespoons peppermint essential oil, ½ cup plus 2 tablespoons rosemary essential oil, 2 tablespoons white cedar essential oil, and ¼ cup citronella essential oil. Add mixture to the cooled sodium lauryl sulfate mixture.

Flies

- Prevent their development inorganic wastes by keeping kitchen garbage in tightly closed containers. In warm weather, the average garbage pail can attract and allow reproduction of 1,000+ flies per week!

- Sprinkle dry soap into garbage cans after they have been washed and allowed to dry; it acts as a repellent.
- Use fly swatters, flypaper strips or fly traps.
- Place screened enclosures over cabbage plants to protect against the fly that breeds the cabbage maggot.
- Plant tansy near your kitchen door or where flies tend to cluster. Other fly repellents include clove essential oil and mint sprigs.
- Set a sponge in a saucer and soak it with lavender essential oil to repel flies.
- Shape a piece of paper into a cone and insert it into the neck of a baited jar. Flies can get in but not out.
- A pot of basil set on a windowsill or table will help reduce the number of flies in a room.

Mosquitoes

- Rub citronella oil on exposed areas or burn citronella candles.
- Do not eliminate natural predators such as dragonflies or the praying mantis.
- Other natural repellents are pennyroyal, mint rubbed on the skin, and tansy or basil planted near a door.
- Eliminate pools of stagnant water.
- Use mosquito traps instead of pesticides.

Moths

- Destroy all forms of the moth by dry-cleaning or washing garments; kill moth eggs by running clothes through a warm dryer. Store in sealed boxes or bags.
- Chicago-area weavers and spinners use ½ lb. rosemary, ½ lb. mint, ¼ lb. thyme, ¼ lb. ginseng and 2 tablespoons cloves. Mix and put in cheesecloth bags for use similar to sachet. Helpful when fresh.
- Hang or place fresh sachets of any of the following with stored clothes: dried lemon peels, dried lavender, bay leaves, whole cloves, cedar chips, dried rosemary and mint or whole peppercorns.
- Wash pantry shelves periodically to deter “flour” moths. Sprinkle with bay leaves, rosemary or cloves. Keep all flours and condiments in sealed containers.

Roaches

- Sprinkle cracks and dark places with a boric acid formulation.
- Set out dishes with equal amounts of oatmeal flour and plaster of paris, or equal amounts of baking soda and powdered sugar, or equal amounts of borax and brown sugar. Keep out of reach of children and pets.
- Starve them, seal all food in jars with rubber rings or inner liners in the cap, rinse food completely off dishes that may stand out overnight; do not leave pet food out overnight.
- Caulk cracks; close off all gaps around pipes and electric lines where they enter the house by using screening or cement.
- Place bay leaves around cracks in room.

Snails and Slugs

- Set out a bait of stale beer, spoiled yogurt, or a mixture of yeast and water in saucers or tuna cans. Bury with the lip of container level with the ground, so pest fall in and drown.

Put a raised cover over the trap to keep rain from diluting the beer and keep large animals from drinking.

- Slugs cannot cross a 3-inch barrier wide sheet of copper. Cut sheet copper to size and attach to raised beds or planters. This method also keeps slugs in, so be sure to remove any slugs first. Apply banding vertically (like a fence) rather than horizontally (like a floor). The copper remains effective after it turns green. The up-front investment is repaid in long-term, effective slug control.

The above information was obtained from the *Environmental Bulletin: Less-Toxic Alternatives* flyer published by the Texas Commission on Environmental Quality and the *Alternative Household Product Recipes* brochure published by Los Angeles County.

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