

ALTERNATIVE HOUSEHOLD Cleaning Solutions

Many of the ready-made solutions we purchase to clean and maintain our homes contain poisonous or toxic chemicals. While the labels on these products contain signal words (caution, warning, danger, or poison) to alert us about proper use or potential harm, many do not list the chemical ingredients in the product or hazards associated with the chemical. In most cases, safer alternatives are available. The basic ingredients listed below can be mixed or used alone for many household cleaning tasks. Also, in the event of an accident, these ingredients can be identified by most consumers and health care professionals.

Selected Basic Cleaning Ingredients

INGREDIENT	GENERAL USE
Ammonia*	all-purpose cleaner
Baking soda	cleaner, deodorizer, fire extinguisher, scouring powder
Boiling water	drain cleaner
Borax*	cleaner, disinfectant, laundry aid, water softener
Lemon	cleaner, deodorizer, stain remover
Salt	cleaner
Soap	cleaner
White vinegar	cleaner, deodorizer, grease cutter
Washing soda*	cleaner, laundry aid, grease cutter, stain remover, water softener, disinfectant; it can be found in the laundry section of grocery stores near the dry bleach.

* These products are not completely nonpoisonous, but they are less toxic than their ready-made counterparts.

Cleaning Hints

- Wear gloves to protect hands.
- Use the simplest, mildest cleaner that will complete the job.
- Never mix bleach with ammonia or products that contain these ingredients. A poisonous gas will be produced.

Use these and other cleaning solutions with **caution**. Keep cleaners out of the reach of children during storage and use. Penn State assumes no responsibility for the effectiveness of these alternatives.

All-purpose cleaner

1. Mix 1 teaspoon borax with 1 quart of warm water. Add a splash of lemon juice or vinegar to cut grease.
2. Mix 2 teaspoons borax with 1 teaspoon soap in 1 quart of water. Can be stored in a spray bottle.
3. Mix 3 tablespoons of washing soda per quart of warm water.
4. Ammonia (household). Use according to label directions in the laundry, toilet, and for other cleaning jobs around the house. While this product is inexpensive, it can be a respiratory irritant so use with extreme caution and in well-ventilated areas.

Air fresheners

1. Place desired amount of baking soda in closed areas such as refrigerator and closets.
2. Put 2 to 4 tablespoons baking soda or vinegar in desired locations throughout rooms that need deodorizing.
3. Boil cinnamon, cloves, or your favorite spice.
4. Burn matches or a candle.

Carpet deodorizers

1. Sprinkle carpet with baking soda. Wait 15 minutes or longer and vacuum.

Disinfectant

1. Mix ¼ cup borax in ½ gallon hot water.

Drain cleaners

1. Prevention is the best method. Use a drain strainer. Do not pour grease down the drain.
2. For maintenance, pour about 1 gallon of boiling water down the drain weekly.
3. Use a plunger or metal snake (snakes may be available at rental stores).

Tile, tub, and toilet cleaner

1. Use a detergent and cloth, or a stiff brush and one of the following: baking soda or borax.

Floor cleaners

1. Wood or vinyl floors: mix ¼ cup oil soap with 1 gallon of warm water.
2. Use a mild detergent. Add a few drops of vinegar to help remove grease.

Copper

1. Apply catsup; wash off quickly.

Silver

1. Rub with a paste of baking soda and water.
2. Place a piece of aluminum foil to cover the bottom of a pan. Add 2 to 3 inches of water, 1 teaspoon baking soda, an 1 teaspoon salt per quart of water and bring to a boil. Add silver pieces and boil 2 to 3 minutes. Make sure the water covers the silver pieces. Remove silver; rinse, dry, and buff with a clean cloth.

Oven cleaner

1. Prevention: put a sheet of aluminum foil on the oven floor. Be careful not to touch the heating element. Clean up spills as soon as they occur.
2. Mix 3 tablespoons of washing soda per quart of warm water. Spray on and wait 20 minutes. Scrub with a fine steel wool pad if necessary.
3. Mix thoroughly 2 teaspoons borax, 2 teaspoons liquid soap, and warm water. Put in a spray bottle. Spray it on and leave for 20 minutes. Scrub with a fine steel wool pad if needed.

Window and glass cleaners

1. Mix 1 part water to 1 part vinegar in a spray bottle. Wipe off with cleaning cloth. (Note: if unusual streaking occurs during the first time you use this solution, it is due to the wax that some chemical glass cleaners contain. Remove wax with a little rubbing alcohol and then clean with the above solution.)

Prepared by Cathy F. Bowen, associate professor of agricultural and extension education.

Visit Penn State's College of Agricultural Sciences on the Web:
www.cas.psu.edu

Penn State College of Agricultural Sciences research, extension, and resident education programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and the U.S. Department of Agriculture.

This publication is available in alternative media on request.

This publication is available from the Publications Distribution Center, The Pennsylvania State University, 112 Agricultural Administration Building, University Park, PA 16802. For information telephone 814-865-6713.

Where trade names appear, no discrimination is intended, and no endorsement by Penn State Cooperative Extension is implied.

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. It is the policy of the University to maintain an academic and work environment free of discrimination, including harassment. The Pennsylvania State University prohibits discrimination and harassment against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, gender identity, or veteran status. Discrimination or harassment against faculty, staff, or students will not be tolerated at The Pennsylvania State University. Direct all inquiries regarding the nondiscrimination policy to the Affirmative Action Director, The Pennsylvania State University, 328 Boucke Building, University Park, PA 16802-2801; Tel 814-865-4700/V, 814-863-1150/TTY.

Produced by Ag Communications and Marketing

CODE # UI289 R3M03/09mpc3748