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Money Saving Tips on Household Cleaners  
Michigan State University Cooperative Extension Service  
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# Money Saving Tips on Household Cleaners

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Cooperative Extension Service  
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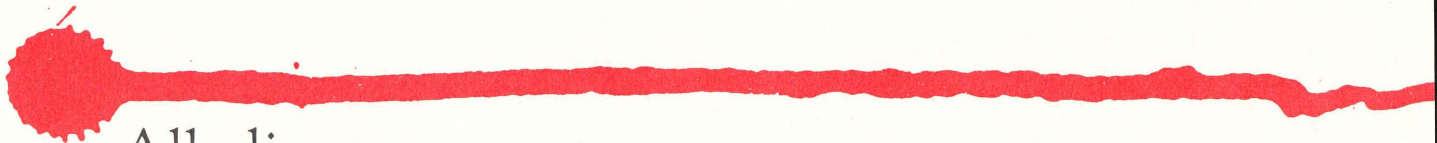


## Introduction

People who learned to buy disposables aren't throwing away as they once did. To save money, many are making an effort to keep their possessions in good condition with proper cleaning and care.

Many good cleaners are available from retailers, although a few simple household materials will often do an equally good job for less money. Basic cleaning agents found in just about every household include alkalis, acids, detergents, abrasives and bleaches. They are readily available and may be purchased in supermarkets and hardware and paint stores.

The following charts provide information about specific cleaners in each of the basic categories, their relative strength, uses and cautions. Recipes and suggestions for use of homemade cleaning preparations are given, as well as helpful hints for miscellaneous cleaning and stain removal.



**Alkalis** remove and suspend heavy soils and grease so they can be washed away. Strong alkalis can damage fabrics, skin and eyes; darken and corrode aluminum.

Material	Uses	Cautions
<i>Mild</i>		
● <b>Baking Soda</b> or Sodium Bicarbonate	With a weak solution, soak burned pans or clean stainless steel sinks, chrome fixtures, fiberglass tubs, ceramic tile, porcelain enamel, refrigerators. Use a paste to scour heavily soiled or sticky spots or coffee- or tea-stained cups.	
<i>Moderate to Strong</i>		
● <b>Ammonia</b>	Use a solution to wash windows, walls, range burners and other greasy surfaces. Strong solutions may remove some waxes. Use full strength to clean ovens.	Very strong solutions may soften paint; has a slight bleaching effect; <b>NEVER mix with chlorine bleach—FUMES ARE TOXIC.</b> Be sure to rinse thoroughly.
● <b>Borax</b>	Wash sinks and painted walls.	Be sure to rinse thoroughly.
● <b>TSP</b> or Trisodium Phosphate	Use a mild solution (1 tbsp/gal of water) to wash painted surfaces, porcelain fixtures and glazed and unglazed tile; removes soot, smoke and greasy dirt.	Always wear rubber gloves to protect skin; strong solutions will remove paint. Be sure to rinse thoroughly.
<i>Strong</i>		
● <b>Washing Soda</b> or Sodium Carbonate	Can dissolve grease clogs from drains.	Has a bleaching effect; <b>HIGHLY TOXIC.</b>
● <b>Lye</b> or Sodium Hydroxide	Opens/clears clogged drains.	Extremely caustic; will cause serious burns to eyes and skin; <b>HIGHLY TOXIC</b> , follow label instructions exactly.

**Acids** remove tarnish, alkaline discolorations and corrosion from metals; remove hard water deposits from many surfaces; will neutralize alkalis; may have bleaching effects; can injure eyes, skin and fabrics; stronger acids are highly toxic and can eat through metal.

Material	Uses	Cautions
<i>Mild</i>		
<ul style="list-style-type: none"> <li>● <b>Lemon Juice</b> or Citric Acid</li> <li>● <b>Vinegar</b> or Acetic Acid</li> </ul>	Dissolve hard water deposits, mild rust stains and soap film; remove tarnish from brass and copper.	Has a slight bleaching effect.
<ul style="list-style-type: none"> <li>● <b>Cream of Tartar</b> or Tartaric Acid</li> </ul>	Simmer a solution in aluminum pans to remove discoloration.	
<i>Strong</i>		
<ul style="list-style-type: none"> <li>● <b>Oxalic Acid</b> (an ingredient in commercial rust removers)</li> </ul>	Removes iron rust; use a weak solution to remove rust stains from tubs and sinks.	Has a bleaching effect; <b>HIGHLY TOXIC</b> , follow label instructions exactly.

**Detergents** dissolve dirt and grease in water; high-sudsing, be sure to rinse thoroughly with clear water.

Material	Uses	Cautions
<i>Mild</i>		
<ul style="list-style-type: none"> <li>● <b>Liquid Dish Detergent</b></li> </ul>	With a warm water solution, wash counters, walls, linoleum floors, appliances, fixtures.	Suds must be rinsed thoroughly.
<i>Moderate</i>		
<ul style="list-style-type: none"> <li>● <b>Laundry Detergent</b></li> </ul>	Removes heavy soil and grease from walls, floors and fixtures.	May contain high levels of alkalis that can irritate skin with prolonged contact; strong solutions can dissolve paint.

## Abrasives (continued)

### Strong

- Coarse Steel Wool
- Metal Grit Cloths
- Metal Mesh Balls
- Metal Brushes
- Coarse Pumice
- Silica Particles

(often an ingredient in commercial scouring powders)

Scour barbecue grills.

Not recommended for general household use; will scratch fine surfaces.



## Commercial Cleaners

are readily available and are frequently more expensive than homemade cleaning preparations. They are generally low sudsing detergents or alkaline-based cleaners. They may, however, contain ingredients that are more convenient and more effective for certain cleaning jobs. For example, some cleaners contain petroleum-based solvents, which are good for dissolving grease and greasy soils.

Form	Uses	Special Notes
● Powders	Dissolve in water; use to clean large surface areas such as painted walls, woodwork and washable floors.	May contain trisodium phosphate.
● Liquids	Dilute in water; use for same cleaning jobs as powders. Use full strength for spot removal and touch-up cleaning.	Follow label instructions; rinse if label indicates.
● Sprays	Use full strength from the bottle and wipe dry, usually no rinsing required; use for touch-up cleaning and spot removal.	Generally more expensive to use than liquids or powders.



# Homemade Cleaning Preparations

*Before starting ...* set up a new kitchen file labeled **Cleaning Formulas** and keep it handy—you're more likely to use them and save money. Some basic ingredients used in the following cleaning formulas are listed below. You may want to keep a supply of them on hand.

Ingredients		Cautions
<ul style="list-style-type: none"><li>● Ammonia</li><li>● Baking Soda</li><li>● Chlorine Bleach</li><li>● Detergent—liquid dish detergent powdered or liquid laundry detergent</li></ul>	<ul style="list-style-type: none"><li>● Salt</li><li>● Trisodium Phosphate (TSP)</li><li>● Vinegar</li></ul>	<ul style="list-style-type: none"><li>● Measuring utensils used for cleaners <b>should not</b> be used for food.</li><li>● Store formulas in tightly closed containers, accurately labeled and out of children's reach.</li></ul>



# Homemade Cleaning Preparations

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## Ingredients

- Ammonia
- Baking Soda
- Chlorine Bleach
- Detergent—liquid dish detergent  
powdered or liquid laundry detergent
- Salt
- Trisodium Phosphate (TSP)
- Vinegar

## Cautions

- Measuring utensils used for cleaners **should not** be used for food.
- Store formulas in tightly closed containers, accurately labeled and out of children's reach.





## Interiors

### ● Painted Walls and Woodwork

Use one of the following to wash painted surfaces: ¼ cup ammonia and 1 gal warm water, OR 1 tbsp trisodium phosphate and 1 gal warm water, OR ¼ cup liquid dish detergent and 1 gal water. To prevent streaking, begin washing at the bottom of the wall and work toward the top; wash ceiling last. Rinse thoroughly and change rinse water frequently.

### ● Windows and Glass

Use one of the following mixtures to clean glass and windows: to remove soil and grease, use ¼ cup ammonia diluted in 2 qts warm water; to remove hard water deposits and soil, use ¼ cup vinegar diluted in 2 qts warm water; to remove extra heavy soil and grease build-up, combine ½ cup ammonia, 2 cups rubbing alcohol and 1 gal water.

#### Tips

- when washing windows, wash sills and cross-pieces first
- wipe windows with lintless cloth, paper towels or crumpled newspapers
- to prevent streaking, wash windows out of direct sunlight
- for touch-ups, keep any one of the above preparations in a spray bottle, spray on dirty area and wipe

### ● Upholstery

(Note: Commercial upholstery shampoos do a good job and are easy to use. However, if you wish, you can use the following homemade preparation.)

Combine ¼ cup liquid dish detergent or laundry detergent and 1 cup warm water. With a hand mixer, whip until dry suds form (the suds will look like whipped cream).

Test upholstery in an unnoticeable area by applying dry suds with a cloth or soft brush and lightly scrubbing. Allow to dry. If the area looks the same but cleaner, the entire piece of upholstery may be cleaned in this manner. Shampoo only a small area at a time and use a spatula or rubber scraper to lift off dirty suds. Repeat if necessary, then wipe area with a clean cloth dipped in clear water and wrung nearly dry. Dry completely.

#### Tips

- keep upholstery as dry as possible while shampooing to prevent damage
- for quick drying, open windows or turn on an electric fan, a dehumidifier, or an air conditioner in the same room

### ● Household Odors

To freshen room air, dampen cotton balls with oil of wintergreen and place out of sight but where air will touch them.

### ● Candles, Telephones

Sponge with a piece of cotton dipped in rubbing alcohol.

### ● Carpet Freshener

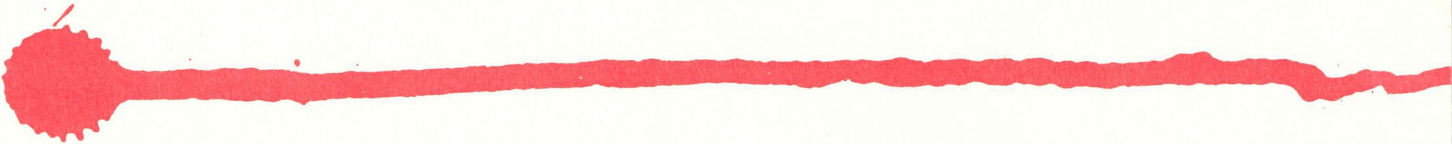
Combine ¾ cup baking soda, 2 tbsp corn starch, and ¼ cup perfumed talcum powder. Sprinkle on dry carpet, let stand 5 to 15 minutes, then vacuum.

### ● Cobwebs

For hard to reach spots, slip a sock over the end of a yardstick and secure with a rubber band, then sweep the area. This method works well for cleaning under radiators and refrigerators also.

### ● Pet Urine

Dab area with toweling, wash with suds of liquid dish detergent, and rinse with ½ cup vinegar diluted in 1 qt warm water. Lay towels or paper towels over the spot and weight down to absorb excess moisture. Let stand 4 to 6 hours, then remove toweling, brush up nap and allow to dry completely. To speed drying, use an electric fan.



## Kitchens

### ● Ovens

Fill a small glass bowl with ½ cup full-strength ammonia, place in oven and close. Let stand overnight, then wipe loosened dirt with paper towels or newspapers. If necessary, rub surfaces with a suitable abrasive, such as fine steel wool, then wash with warm soapy water and rinse. Repeat process if necessary.

### ● Pots and Pans

#### ● Burned- and Crusted-on Foods

Soak or boil a solution of 2 tbsp baking soda per qt of water in each pan. Let stand until particles are loosened, then wash as usual. Use a mild or moderate abrasive if necessary.

#### ● Discolored Aluminum

Heat a solution of 1 tbsp vinegar per qt of water or 2 tsp cream of tartar per qt of water in each pan until discoloration disappears.

#### ● Grease

Rub greasy spots with a mild or moderate abrasive, such as fine steel wool, and a dish detergent until they disappear.

#### ● Stained No-Stick Cookware

To remove stains from no-stick surfaces, pour a solution of 1 cup water, 2 tbsp baking soda and ½ cup chlorine bleach into the pan and simmer 5 to 10 minutes. Do not allow mixture to boil or to boil over the side of the pan. Wash in hot soapy

water, rinse and dry. Apply a light coating of cooking oil. (Note: This formula may fade dark-colored surfaces.)

#### ● Copper Pots

To remove tarnish from copper pots, rub with lemon halves dipped in salt.

### ● Refrigerators

To clean exterior and interior walls, dissolve 2 tbsp baking soda in 1 qt warm water and wipe all surfaces. For stubborn spots, rub with baking soda paste. Be sure to rinse with a clean, wet cloth. (This works well on other enamel-finished appliances as well.)

To clean interior fixtures, such as vegetable bins and shelves, wash in hot soapy water, rinse well and dry.

### ● Enamel, Ceramic or Glass Baking Dishes

Soak in hot soapy water, then scour with salt or baking soda and rinse thoroughly.

### ● Coffee and Tea Stains

To remove coffee or tea stains from cups or counters, rub with baking soda paste. For stubborn stains, rub a drop of chlorine bleach into the affected area until the stain disappears, then wash immediately with hot soapy water to prevent fading, and rinse well.


### ● Sticky Labels

Cover label with a cloth or sponge saturated with warm vinegar and let stand. When the label is saturated, it should peel off without scraping or causing damage. Rinse. (Note: Use this method only on washable surfaces and washable paint.)

To remove labels from plastic, dab with dry-cleaning fluid, then rub. Wipe away any excess fluid and wash plastic immediately in hot soapy water (dry-cleaning fluid may dull the finish of plastic). If labels on plastic have been wet or the article has been stored in a hot, damp area, the label will be more difficult to remove.

### ● Drains

To keep drains clear, flush daily with scalding water. For grease buildup, dissolve 1 lb washing soda in 3 gal boiling water and pour down drain. To avoid burns from boiling water, hold water container close to drain and pour slowly and directly into drain. For heavy grease buildup, use a commercial drain opener. Exercise extreme caution when using and follow label instructions exactly. (Commercial drain openers can be used to clear hair buildup from bathroom drains, also.)



## Interiors

### ● Painted Walls and Woodwork

Use one of the following to wash painted surfaces:  $\frac{1}{4}$  cup ammonia and 1 gal warm water, OR 1 tbsp trisodium phosphate and 1 gal warm water, OR  $\frac{1}{4}$  cup liquid dish detergent and 1 gal water. To prevent streaking, begin washing at the bottom of the wall and work toward the top; wash ceiling last. Rinse thoroughly and change rinse water frequently.

### ● Windows and Glass

Use one of the following mixtures to clean glass and windows: to remove soil and grease, use  $\frac{1}{4}$  cup ammonia diluted in 2 qts warm water; to remove hard water deposits and soil, use  $\frac{1}{4}$  cup vinegar diluted in 2 qts warm water; to remove extra heavy soil and grease build-up, combine  $\frac{1}{2}$  cup ammonia, 2 cups rubbing alcohol and 1 gal water.

#### Tips

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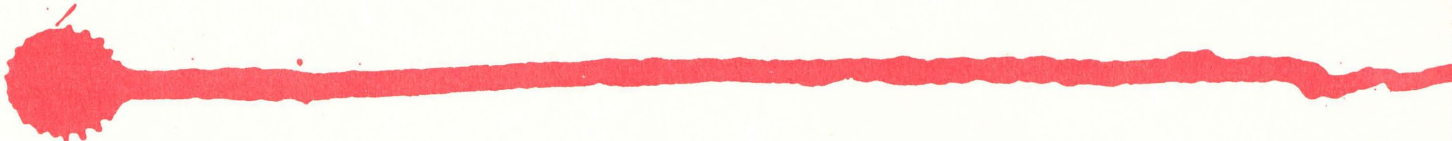
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## Bathrooms

### ● Disinfectant/Mildew Remover

Dilute  $\frac{3}{4}$  cup chlorine bleach in 1 gal of water. Apply to tile and grout and scrub; wipe shower stall and curtain; rinse thoroughly.

### ● Fixtures

To clean stainless steel, chrome, fiberglass, ceramic, porcelain or enamel fixtures, dissolve 2 tbsp baking soda in 1 qt of water.

### ● Rust Stain and Hard Water Deposit Remover

Apply full-strength vinegar or lemon juice and let stand until spot disappears, then rinse. Repeat if necessary.

### ● Soap Scum

Apply baking soda dry or as a thick paste, rub vigorously with a wet sponge, then rinse.

### ● Toilet Bowl

Pour  $\frac{1}{4}$  cup full strength chlorine bleach OR  $\frac{1}{2}$  cup full strength ammonia into bowl. **DO NOT USE BOTH.** Swish with a bowl brush and flush.

### ● Combs and Brushes

Fill a basin with hot water, and add either 2 tbsp ammonia OR 1 tsp liquid dish detergent. Drop in combs and brushes and soak 10 minutes, then use combs to clean brushes. Rinse thoroughly and air dry.

