

## TOXIC CHEMICALS

- Sodium Hypochlorite (Chlorine Bleach)
- Ammonia (Window Cleaners)
- Benzene (Paint Strippers)
- Ethylene Glycol Butyl Ether (EGBE) or trade name - Butyl Cellosolve (Degreasers)
- Crystalline Silica (Paints)
- EDTA (Liquid Soaps)
- Lye Naptha (Oven or Drain Cleaner)
- NTA (Laundry Detergents)
- Paradichlorobenzene (Mothballs)
- Perchloroethylene (Dry Cleaning)
- Pesticides
- Petroleum Distillates (Automotive, Shoe care and Floor Cleaning Products)
- Phenolic Compounds (All purpose Cleaners, Mouthwash, Sugar Substitutes)
- Phosphates (Dishwasher Detergents)
- Phosphoric Acid (Rust Removal, Beverages)
- Sodium Hydroxide ("Caustic", Soap, Paint Stripper, Food Preparation)
- Trichloroethylene (Carpet Cleaners, Adhesives, Paint Strippers)

## TOXIC PRODUCTS

- Chlorine Bleach
- Pesticides
- Disinfectants
- Oven Cleaners
- Drain Openers
- Toilet Bowl Cleaners
- Scouring Powder
- Aerosol Cleaners
- Furniture Polish
- Spot Remover
- Paints
- Paint Thinners
- Automotive Cleaners
- Aerosol Hairsprays
- Fertilizers
- Finger Nail Polish Remover/Cosmetics
- Carpet/Rug Cleaners and Deodorizers
- Polishers and waxes

\*List provided by the Association of Vermont Recyclers

All products for making alternative healthy cleaners may be purchased at any local grocery, organic, health or whole food stores.

Basic ingredients for non-toxic cleaners:

Baking Soda - Cleaner and Deodorizer  
White Vinegar - Degreaser and Air freshener  
Borax - Cleaner and Disinfectant  
Castile Soap - Cleaner (biodegradable)  
Washing Soda - Degreaser and Stain Remover  
Essential Oils - Disinfectant and Air freshener

DO NOT dispose of household hazardous wastes by pouring them on the ground or into the storm sewer or gutter and DO NOT put liquid wastes or old medications in the trash, down the drain, sink or toilet.

For proper disposal methods call the Recycle Hotline: (719) 583-4924



# HEALTHY HOUSEHOLD CLEANERS

PUEBLO CLEAN INDOOR AIR INITIATIVE



Clean Smarter...Be Healthier

## THE HEALTHY HOME

Almost every home contains some form of Household Hazardous Waste (HHW). Anything from paint to window cleaner to motor oil may be considered hazardous. Solid, liquid or gas items that are flammable, corrosive, toxic, reactive or just plain bad for the environment or your family's health should be used less, stored and disposed of properly. Hazardous materials can be found all over the home, from the kitchen to the bathroom to the garden or the garage.

Improper disposal of hazardous waste, such as flushing it down the drain, will pollute drinking water. Local wastewater treatment plants do not clean all hazardous waste from water and stormwater is not treated, so liquids poured down storm drains directly pollute local rivers and lakes. Throwing items into the household trash may lead to physical injury to sanitation workers and contamination of soil at landfills.

Using natural alternatives or environmentally friendly products to lower or eliminate the HHW in your home can be more cost effective and are safer for your family's health and environment. For example, name brand paints now have products that contain low levels of Volatile Organic Compounds (VOCs), which are harmful fumes that are released from man-made products. Old mercury thermostats and thermometers should be replaced to avoid breakage and spillage. Using natural pest controllers or making household cleaners are easy to make and cost pennies.

This book offers alternative recipes for HHW products.

For more information call :

PuebloCAREs Hotline: (719) 252-6258

Pueblo City-County Health Department: (719) 583-4524

Poison Center: 1-800-332-3073

Or visit:

[www.pueblocares.org](http://www.pueblocares.org)

Note: These recipes and substitutions are offered to help minimize the use of HHW substances in your home, and to help reduce the environmental harm caused by corrosive, reactive, flammable and toxic manufactured products. Results may vary and cannot be 100% guaranteed, but a little elbow grease never hurt anyone. It is always recommended to first test the cleaner in small hidden areas if possible, before applying and using any cleaning formula. Proper labeling, storage and disposal of all cleaners, including non-toxic cleaners is highly recommended. Always use caution with any new product in your home and KEEP OUT OF REACH OF CHILDREN AND PETS.

## TIPS ABOUT HOUSEHOLD HAZARDOUS CHEMICALS

1. Before you buy a product, read the label carefully.
2. Make sure you know what you are purchasing.
3. Choose products with child-resistant packaging.
4. Buy only the amount you need to reduce or eliminate the disposal problem.
5. Select the least toxic products available by choosing non-toxic alternatives when you can.
6. Use multi-purpose products whenever available.
7. **Store all toxic products away from children and pets in safe, tight containers.**
8. Follow all label directions.
9. Use only what is needed, for example: *Twice as much does not mean twice the results.*
10. **Never mix different products. Explosive or poisonous chemical reactions may occur.**
11. **Always store** leftovers in the original container with the original label.
12. Never eat, drink or smoke when handling hazardous materials.
13. Call your local Health Department for Disposal Options.
14. **Always label** homemade cleaner bottles properly.
15. Always dispose of HHW properly.

\***Detergents** cause more poisonings than any other household product.

\***Bleach** is toxic. Dissolved baking soda is a safer cleaner to use than diluted bleach. Use borax or soda to whiten. Borax is a good grease cutter.

\* **Hydrogen Peroxide** is corrosive.

\***Ammonia** should be used only when other cleansers won't do the trick. Ammonia cuts heavy grease and grime but can be dangerous. Fumes irritate eyes and lungs and can be harmful to people with respiratory problems. Always provide good ventilation.

**Never mix ammonia with bleach or commercial cleansers - deadly fumes may form.**

Signal Word	Category	Lethal Dose
Danger or Poison	Highly Toxic	A few drops to 1 tsp.
Warning	Moderately Toxic	1 tsp. to 1 oz.
Caution	Slightly Toxic	1 oz. to 2 c.
(No signal word)	Non-Toxic or not approved by the USDA or FDA and unclassified	Large quantities or not enough research to determine lethal dose



## RECIPES FOR HEALTHY CLEANERS

### Basic Soft Scrubber Formula

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For use on sinks, bathtub, Formica countertops or shower stall.

½ c. baking soda

Enough liquid soap or detergent to make a frosting like consistency

8 to 10 drops fragrant essential oil, such as 5 drops each rose and lavender (optional)

Place the baking soda in a bowl; slowly pour in the liquid soap, stirring all the while, until the consistency reaches that of frosting. Add a few drops essential oil (if using). Scoop the creamy mixture onto a sponge or cut lemon, wash the surface, and rinse.

#### Variation

Antibacterial Soft Scrub: substitute borax for half of the baking soda, and add about 15 drops antibacterial essential oil, such as thyme, sweet orange, lavender, tea tree or cinnamon.

### Mold and Mildew

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2 teaspoons tea tree oil

or

1/2 c. White vinegar

2 c. water

1/2 c. Borax

Enough warm water to dissolve in bowl

Combine the ingredients in a spray bottle or bowl, shake or stir to blend, and spray or sponge on problem areas. Do not rinse. The strong odor from the tea tree oil will dissipate in a day or so. This can be sprayed directly on mold, such as a moldy shower curtain, or to eliminate musty smells, such as a musty rug.

### Wood Furniture Duster

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¼ c. white distilled vinegar

A few drops jojoba or olive oil

3 to 5 drops fragrant essential oil (optional)

Combine the ingredients in a bowl, dab some on a soft natural-fiber rag, and use to dust. The vinegar draws dirt out of the wood, and the vinegar smell will dissipate in a few hours.

### Oven Cleaner

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1/4 c. Baking Soda

or

2 Tbsp. Castile Soap (scented optional)

2 Tbsp. salt

2 tsp. Borax

Hot water to make a paste

1 qt. Warm water

Let paste sit on oven for 5 min. or spray on for 20 min. then clean off. Keep off of wires/heating elements. For tough stains, scrub with very fine steel wool and baking soda.

## RECIPES FOR HEALTHY CLEANERS

### Homemade Toothpaste

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2 tablespoons coconut oil

3 tablespoons baking soda

1/2 small packet of stevia powder

20-25 drops of peppermint oil\*

Mix all ingredients together in a small bowl, using a fork.

\*Add about half of the amount of peppermint oil to start, and test the toothpaste to see how much you want/like. You may also try spearmint oil or cinnamon oil.

Since coconut oil melts at 76 degrees, the toothpaste becomes liquid when you brush, and coats the teeth well. The oil is very runny, though, and doesn't leave the mouth feeling greasy in the least. It will, however, stick to your bathroom sink if you use cold water to rinse, so it is recommended to use warm water with this toothpaste.

### Air freshener

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2 Cinnamon Sticks

1/4 c. Orange Peels

Pinch of Cloves

Water

Simmer ingredients together on the stove for about 15 min. The house will smell wonderful. You may also allow liquid to cool and drain water solution into spray bottle.

### Carpet Cleaner

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Normal Stains

1/2 qt. White Vinegar

or

1/2 qt. Water

1 tsp. Castile Soap (scented optional)

Heavy Duty Stains

1/4 c. Borax

1/4 c. Salt

1/4 c. White Vinegar

Warm Water

For normal stains mix the equal parts of vinegar and water into spray bottle. Spray on stain and let set for several minutes. Then scrub carpet with a brush or sponge using warm water and castile soap. For heavy duty stains mix equal parts of ingredients and then add enough warm water to make a paste. Rub the paste into the stain and let set for a few hours. Then vacuum.

Recipes are provided by the [www.ecocycle.org](http://www.ecocycle.org), [www.eartheasy.com](http://www.eartheasy.com) and Better Basics for the Home by Berthold Bond.