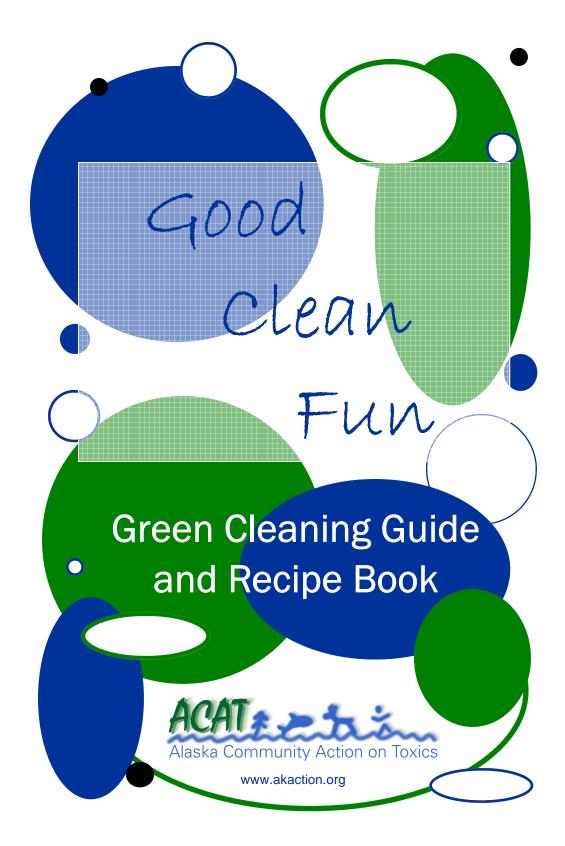
## Green Cleaning for Healthy Schools



...additional sources on non-toxic cleaning at home...

- Green Seal Certified Household Products http://www.greenseal.org/FindGreenSealProductsandServices.aspx?vid=ViewProductDetail&cid=3
- UL Eco-Logo certified Products and Services for Your Home <a href="http://industries.ul.com/environment/">http://industries.ul.com/environment/</a>
- How to Make a (Home) Non-Toxic Cleaning Kit
   Posted by Annie B. Bond, Apr 3, 2009.
   <u>http://www.care2.com/greenliving/make-your-own-non-toxic-cleaning-kit.html</u>
- Alternative Cleaning Products City of Los Angeles, Dept. of Public Works, <u>http://ladpw.org/epd/hhw/alternative.cfm</u>
- Clean and Green: Healthy Homes, Healthy People http://www.uaex.edu/publications/PDF/MP492.pdf





## The DIRT on Household Cleaners

Most of us buy **household cleaners** to create a clean, healthy environment. But did you know that some of the products you use may be **harmful** to your health? Some household cleaners contain toxic chemicals linked to birth defects, fertility problems, cancer, asthma, and other adverse health effects.

#### What About Buying "Natural" Cleaners?

Some cleaners are advertised as natural, green, organic, and pure alternatives. Be aware that companies are not required to list product labels, ingredients on nor are ingredients evaluated by a regulatory body for safety before going to market. Some products contain "fragrance," a trade secret for masking a chemical smell and indication that the product may contain toxic chemicals. It sure sounds great to call a product "natural", but unless you can see exactly what is in it, you cannot know for sure whether the ingredients are safe or toxic.

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## Some Ingredients to Avoid

Aerosol products may contain propane, formaldehyde (a carcinogen, neurotoxin and central nervous system depressant), methylene (a carcinogen, neurotoxin and reproductive toxin), and nitrousoxide.

(APEs) Alkyl phenol ethoxylates and (NPEs) nonylphenol ethoxylates are surfactants found in laundry detergents, stain removers, and all-purpose cleaners. They have been found to reduce embryo survival in fish and alter tadpole development.

Ammonia is a severe eye and respiratory irritant that can cause intense burning pain, corrosive damage including chemical burns, cataracts and corneal damage. It can also cause kidney and liver damage.

(DEA) Diethaolamine is a skin and respiratory toxicant and a carcinogen. It is used in a wide range of household cleaning products.

**Glycol ethers** are solvents commonly found in glass cleaners and all-purpose spray cleaners. They have been associated with low birth weight in exposed mice.

**Monoethanolamine** may cause liver, kidney and reproductive damage, as well as depression of the central nervous system. Inhalation of high concentrations - when cleaning an oven for example - can cause dizziness or even coma. It is found in many cleaning products, including oven cleaners, tub and tile cleaners, laundry pre-soaks, floor strippers and carpet cleaners.

Phthalates are carriers for fragrance in glass cleaners, deodorizers,

laundry detergents and fabric softeners that are linked to adverse effects on male children, reduced sperm count in adult men, and increased allergic symptoms and asthma in children.

**Xylene** is a neurotoxin that can lead to memory loss, loss of consciousness and even death in extreme exposures. It may damage liver, kidneys, and the developing fetus. It is used in some spot removers, floor polishes, and ironing aids.

# The HOMEMADE SOLUTION

The good news is that you can **avoid toxics** in cleaners altogether by **making your own** cleaning products.

what are the advantages of using nontoxic cleaning products?

Less Expensive

Safer For You, Much Safer For Children

Ingredients are Widely Available

Less Packaging and Advertising

Very Effective

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## Basic Ingredients

Baking Soda - cleans, deodorizes, softens water, scours

**Borax** - sounds scary but isn't! Borax is a powder or crystalline salt used as a water softener, disinfectant, and deodorizer. Cleans wallpaper, painted walls and floors without damaging the finish. It also makes an excellent freshener when added to laundry. You can buy it at the grocery store.

**Essential Oils** - are liquids formed from the distillation of the leaves, stems, or flowers of a plant. They are very concentrated liquids, so a few drops go a long way. Essential oils are purely optional in our recipes; they add an attractive scent

to the cleaning products, some have anti-bacterial properties, and act as a preservative. Buy them at a health food store or online.

**Lemon Juice** - acts as a natural fragrance and deodorizer. It cuts through grease, removes perspiration and other stains from clothing, and serves as a bleach alternative.

**Soap Flakes** - You can buy a box of soap flakes at a natural food store or online, but you can also make your own! Use any non-liquid castile soap and grate it with a cheese grater or buy a liquid castile soap (like Dr. Bronner's).

**Vegetable Glycerin** - is used as a preservative and is a by-product of palm and coconut oil production. You can buy it online or find it in soap-making supply stores, health food and/or herbal supplement stores. Essential oils may be substituted as an alternative preservative, but if you plan to make a large batch of cleaner and save some for later use, vegetable glycerin will significantly increase the shelf life of your product.

**Vinegar** - buy the white, cheap kind. Vinegar cuts grease, removes mildew, odors, some stains and wax build-up.

**Washing Soda** (sodium carbonate) - is in the same family as baking soda but it is much more caustic, so you should wear gloves when mixing it. It cuts grease, removes wax and lipstick, and neutralizes odors in the same way that baking soda does. Washing soda is found in the laundry section of most grocery stores.

### RECIPES

#### **ALL-PURPOSE CLEANERS**

#### Recipe #1

2 cups white distilled vinegar 2 cups water 20-30 drops essential oil (optional) Warming in microwave until barely hot will boost cleaning power for tough jobs. Only microwave in a glass container.

#### **GENTLE WINDOW CLEANER**

3 teaspoons liquid soap 3/4 cup white vinegar 1/2 teaspoon baking soda Combine all ingredients in a spray bottle. Shake well before using.

#### **DRAIN OPENER**

1 cup salt 1 cup baking soda  $1/2 \operatorname{cup vinegar}$ Pour the 3 ingredients down the drain. Let sit 15 minutes and flush with 2 quarts boiling water.

#### LIQUID DISH SOAP

22 oz liquid castile soap 30 drops essential oil of your choice *Combine the 2 ingredients. Citrus oils are super degreasers.* 

#### LAUNDRY DETERGENT

1/2 cup baking soda 1/2 cup powdered castile soap 1/4 cup washing soda  $1/4 \operatorname{cup} \operatorname{borax}$ Mix ingredients well. Use 1/2 cup per load.

#### **FABRIC SOFTENER SACHET**

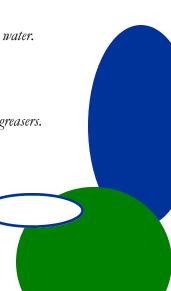
1/2 cup baking soda 1 tablespoon arrowroot powder 1-3 drops lavender essential oil (optional) 1 tablespoon cornstarch Mix together and place a few spoonfuls inside a sachet of tightly woven fabric. Tie tightly and add to dryer cycle. Refill when fragrance fades.

#### Recipe #2

1 teaspoon liquid castile soap 1 teaspoon borax

- 2 tablespoons vinegar
- 2 cups hot water
- 1/4 teaspoon eucalyptus essential oil
- 1/4 teaspoon lavender essential oil





### RECIPES

#### **SOFT SCRUB** (stoves, bathtubs, tile, and other tough jobs)

#### Recipe #1

2 cups baking soda 1/2 cup liquid castile soap 4 teaspoons vegetable glycerin (preservative) 5 - 10 drops lavender or tea tree essential oil *Mix together and store in a sealed glass jar; shelf life of 2 years. For exceptionally tough jobs, spray with vinegar first. Let sit and follow with scrub.* 

#### **TOILET BOWL CLEANER**

1/2 cup baking soda1/4 cup vinegar10 drops tea tree essential oil*Combine all ingredients. Pour in toilet and scrub.* 

#### HARDWOOD FLOOR WASH

1 1/2 cup water
1 1/2 cup vinegar
20 drops peppermint essential oil
Combine all ingredients in a spray bottle. Use sparingly, working on small sections of the floor. Dry mop after using.

#### **GENTLE WOOD CLEANER**

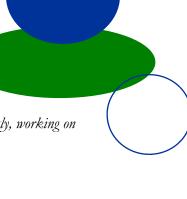
1/2 cup canola oil
1/4 cup liquid castile soap
1/4 cup water *Combine and shake well before using. Apply with a rag and finish with a dry rag.*

#### FURNITURE POLISH

1/4 cup olive oil
1/4 cup white vinegar
20-30 drops lemon essential oil or 2 teaspoons lemon juice
Shake well before using. Dip a clean, dry cloth into the polish and rub wood in the direction of the grain. Use a soft brush to work the polish into corners or tight places.

#### Recipe #2

5 cups grated castile soap
1/2 cup baking soda
1 teaspoon borax
6 cups hot peppermint tea
1 teaspoon eucalyptus essential oil
Put grated soap into a 3 quart stainless
saucepan and add tea. Simmer 15
minutes on low heat. Add remaining
ingredients. Store in a jug or squirt bottle.
Shake before using.



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Alaska Community Action on Toxics ("ACAT") is a statewide nonprofit public interest environmental health research and advocacy organization dedicated to protecting environmental health and achieving environmental justice.

Alaska Community Action on Toxics mission: to assure justice by advocating for environmental and community health. We believe that everyone has a right to clean air, clean water and toxic-free food.

We work to stop the production, proliferation, and release of toxic chemicals that may harm human health or the environment.

