All-Purpose Cleaner: Mix 1/2 cup vinegar and 1/4 cup baking soda (or 2 teaspoons borax) into 1/2 gallon (2 liters) water. Store and keep.

Bathroom Mold: Mix one part hydrogen peroxide (3%) with two parts water in a spray bottle and spray on areas with mold. Wait at least one hour before rinsing or using shower.

Carpet Stains: Mix equal parts white vinegar and water. Spray directly on stain, leave for several minutes. Clean with a brush or sponge using warm soapy water. Heavy duty carpet cleaning; mix 1/4 cup each of salt, borax and vinegar. Rub paste into the carpet. Leave for a few hours then vacuum.

Chopping Block: Rub a slice of lemon across a chopping block to disinfect the surface. For tougher stains, squeeze some of the lemon juice onto the spot and let sit for 10 minutes, then wipe.

Coffee and Tea Stains in cups can be removed by applying vinegar to a sponge and wiping. To clean a teakettle or coffee maker, add 2 cups water and 1/4 cup vinegar; bring to a boil. Let cool, wipe with a clean cloth and rinse thoroughly with water.

Dishwasher Soap: Mix equal parts of borax and washing soda, but increase the washing soda if your water is hard.

Dishwashing Soap: A detergent substitution is to use liquid soap. Add 2 or 3 tablespoons of vinegar to the warm, soapy water for tough jobs.

Disinfectant: Mix 2 teaspoons borax, 4 tablespoons vinegar and 3 cups hot water. Stronger cleaning power add 1/4 teaspoon liquid Castile soap. Apply with dampened cloth or non-aerosol spray bottle.

Drain cleaner: Pour 1/2 cup baking soda down drain, add 1/2 cup white vinegar, and cover the drain. Wait 15 minutes and then pour 1 gallon of hot water down the drain.

Fabric Softener: To reduce static cling, dampen your hands, then shake out your clothes as you remove them from the drier. Line-drying clothing is another alternative.

Floors: Most floor surfaces can be easily cleaned using a solution of vinegar and water. For damp-mopping wood floors: mix equal amounts of white distilled vinegar and water. Add 15 drops of pure peppermint oil; shake to mix.

Ink spots, pencil, crayon or marker spots can be cleaned from painted surfaces using baking soda applied to a damp sponge. Rub gently, then wipe and rinse.

Laundry Detergent: Mix 1 cup Ivory soap (or Fels Naptha soap), 1/2 cup washing soda and 1/2 cup borax. Use 1 tbsp for light loads; 2 tbsp for heavy loads.

Lime Deposits: You can reduce lime deposits in your teakettle by putting in 1/2 cup (125 ml) white vinegar and 2 cups water, and gently boiling for a few minutes. Rinse well with fresh water while kettle is still warm.

Mold and Mildew: Use white vinegar or lemon juice full strength. Apply with a sponge or scrubby.

Oil and Grease Spots: For small spills on the garage floor, add baking soda and scrub with wet brush.

Oven Cleaner: Do not use this cleaner recipe on self-cleaning ovens. Moisten oven surfaces. Use 3/4 cup baking soda, 1/4 cup salt and 1/4 cup water to make a thick paste, and spread throughout oven interior. (Avoid bare metal and any openings.) Let sit overnight. Remove with spatula and wipe clean. Rub gently with fine steel wool for tough spots.

Tub and Tile Cleaner: For simple cleaning, rub in baking soda with a damp sponge and rinse with fresh water. For tougher jobs, wipe surfaces with vinegar first and follow with baking soda as a scouring powder. (Vinegar can break down tile grout, so use sparingly.)

Rust Remover: Sprinkle a little salt on the rust, squeeze a lime over the salt until it is well soaked. Leave the mixture on for 2 - 3 hours. Use leftover rind to scrub residue.

Scouring Powder: For top of stove, refrigerator and other such surfaces that should not be scratched, use baking soda. Apply baking soda directly with a damp sponge.

Toilet Bowl Cleaner: Mix 1/4 cup baking soda and 1 cup vinegar, pour into basin and let it set for a few minutes. Scrub with brush and rinse. A mixture of borax (2 parts) and lemon juice (one part) will also work.

Water Rings on Wood: Water rings on a wooden table or counter are the result of moisture that is trapped under the topcoat, but not the finish. Try applying toothpaste or mayonnaise to a damp cloth and rub into the ring. Once the ring is removed, buff the entire wood surface.

Window Cleaner: Mix 2 teaspoons of white vinegar with 1 liter (qt) warm water. Use crumpled newspaper or cotton cloth to clean. Be sure to follow the recipe; because using too strong a solution of vinegar will etch glass and eventually cloud it.
Ingredients from household cleaning products enter the environment by being flushed down toilets, poured down sinks, sprayed into the air, thrown into the trash, and dumped onto the ground.

Hazardous cleaning products that are landfilled or incinerated may release toxins into the environment. They can contribute to ozone layer depletion, groundwater pollution, soil contamination, and are harmful to plant and animal life.

The following hazardous ingredients should be avoided when possible:

- **Alkylphenol Ethoxylates (APEs)** are found in personal care products, detergents, disinfectants, all-purpose cleaners and laundry cleaners. They are also found in many self-care items including spermicides, sanitary towels and disposable diapers. APEs do not biodegrade easily, and contaminate water.

- **Chlorine bleach** (sodium hypochlorite), available alone and in detergents and other products, is toxic to fish and can bind with organic compounds in water to form organochlorines, which break down slowly in the environment and accumulate in the fatty tissues of wildlife.

- **Ether-type solvents**, methylene chloride, butyl cellosolve, and petroleum distillates found in oven cleaners are hazardous waste and can contaminate the air, water, and soil.

- **Formaldehyde**, an ingredient in furniture polish and various cleaning products, is a potential human carcinogen and a known cancer-causing agent in animals.

- **Naphthas and Mineral Spirits** found in furniture polishes, are neurotoxins and considered hazardous waste. Mineral spirits break down very slowly and contaminate air and water.

- **Pesticides** found in disinfectants are fat-soluble, making them difficult to eliminate from the body once ingested. Pesticides are designed to kill or otherwise adversely affect living organisms.

- **Phosphates** found in dishwasher and laundry detergents cause algae bloom, which kills fish and aquatic plants. Phosphates produce chemicals that are toxic to animals and people who drink the water.

- **Phthalates** found in furniture polish, disrupt hormone function and can cause genetic defects in both animals and humans.

- **Sulfuric acid and sodium hydroxide** in drain cleaners, can change the pH of water and cause fish kills.

- **Trisodium nitrilotriacetate** is a possible carcinogen in laundry detergents. It can disrupt the elimination of metals in wastewater treatment facilities.

Commercial **air fresheners** mask smells and coat nasal passages to diminish the sense of smell. Try one of these natural alternatives:

- Houseplants help reduce odors in the home.
- Place bowls of fragrant dried herbs and flowers in a room.
- Place baking soda or vinegar with lemon juice in small dishes to absorb odors.
- Place a small dish of white vinegar in the room for fresh paint odors.
- Set a sliced onion on a plate in the garage or basement for 12-24 hours.
- Keep fresh coffee grounds on the counter.
- Simmer water and cinnamon or other spices on stove.
- Prevent cooking odors by simmering vinegar (1 tbsp in 1 cup water) on the stove while cooking.
- Grind up a lemon or orange peel in the garbage disposal.

Natural cleaning products offer environmentally sound, cost-efficient alternatives to the toxic and potentially lethal household cleaning products.

- **Baking Soda** - (sodium bicarbonate) neutralizes acid, softens fabrics and water, cleans, deodorizes, scours and polishes metals and plastics.
- **Borax** - (sodium borate) removes stains, deodorizes, disinfects, prevents mold/mildew, softens water, cleans wallpaper, painted walls and floors.
- **Cornstarch** - can be used to clean windows, polish furniture, shampoo carpets and rugs.
- **Citrus Solvent** - cleans paint brushes, oil and grease, some stains. (May cause irritations for people with multiple chemical sensitivities.)
- **Isopropyl Alcohol** - is an excellent disinfectant.
- **Lemon** - one of the strongest food-accids, effective against most household bacteria - deodorizes, cleans glass, and removes stains.
- **Mineral Oil** - polishes furniture.
- **Soap** - unscented soap in liquid form, flakes, powders or bars is biodegradable and will clean just about anything. Avoid using soaps which contain petroleum distillates.
- **White Vinegar** - cuts grease, removes mildew, odors, some stains and wax build-up.

**Washing Soda** - or SAL Soda (sodium carbonate decahydrate). Washing soda cuts grease, removes stains, softens water, cleans walls, tiles, sinks and tubs. Do not use on aluminum. (Washing soda can irritate mucous membranes.)

**Safer Products: Available for Purchase**

Switching to safer cleaning products may be as easy as a click away! Here are some websites that offer safer cleaning alternatives.

- afmsafecoat.com
- benelifeorganic.com
- bi-o-kleen.com
- eco-max.ca
- ecos.com
- greenerdaze.com
- methodhome.com
- mrsmeyers.com
- naturecleaning.com
- planetinc.com
- seasidenaturals.com
- simplegreen.com
- zerotoxicleaner.com

Please dispose of hazardous household cleaning products responsibly. For more information on household hazardous waste collection events please visit the Will County Land Use website or call 815-727-8834.

**Will County Land Use - Waste Services**

The remedies mentioned in this brochure are not sole remedies and may not work in every instance. The Will County Land Use Department, Waste Services Division is not responsible for any misuse of products or applications which may cause further damage. **Always test first.**

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