Storing

Make sure to keep products in their original containers with their labels. Many things look the same and can easily be confused.

When finished with your homemade cleaners, make sure to properly seal and label them.

Do not store your cleaners near food or in food containers. Also do not store incompatible cleaners (bleach and vinegar) together.

Be sure to keep away from children and pets.

Green Cleaning

Do-it-Yourself Safe Cleaning Solutions

Brought to you by the KSC Recycling and Sustainability Office
603-358-2567
All of the recipes and information came from various local sources:
Thanks to Cindy Sterling at Windham County Solid Waste District, the Brattleboro Public Works Department and the 21st Century Water Cure Project: A Community Challenge, the Association of Vermont Recyclers and Casella Waste Systems.
Thanks also to Kaitlyn Taft for help in producing this brochure.

Printed on recycled paper.

- **Flies**
  Push cloves into an orange and hang it in the kitchen to keep those bugs away.

- **Moths**
  In a yellow container, mix 1 part molasses with 2 parts vinegar. Moths will be attracted and stuck to the mixture. Simply remove them and replace the container.

For closets, stuff small cloth pillows with dried lavender or with equal parts of rosemary and mint.

- **Mice**
  Set out a small bowl of potato flakes near a small container of water. The flakes swell up in the mouse until he’s had his fill.
  For a more humane method, chase the mouse into an open umbrella. Close the umbrella, wrap it in an elastic, and bring the mouse at least a 1/2 mile away from your house and preferably not near anyone else’s. Set him free.
Mold

- Combine 2 teaspoons tea tree oil and 2 cups water in a spray bottle. Shake and spray onto problem areas and do not rinse.

- Spray straight white vinegar on the area. Do not rinse, the smell will dissipate in a few hours.

- Mix 1/2 cup 3% hydrogen peroxide solution with 1 cup water in a spray bottle. Spray on area and do not rinse.

  Change bathroom towels and rugs often to reduce moisture buildup.

Pests

- Fleas
  Place a pot of basil on the windowsill. Keeps the bugs away and can be used for cooking.

- Flypaper
  Boil together water, corn syrup, and sugar. Coat brown strips of paper and hang around the house.

- Ants
  Draw a chalk line around the basement of your home. They won’t walk past it. Give it a try!

What are you Cleaning your House With?

Many commercial cleaners contain substances that are toxic and can burn skin or eyes on contact. Without proper ventilation, their use can also cause injury from harmful fumes.

According to the Poison Control Center, in 1997 there were approximately 230,000 overexposures nationwide to household cleaners of which 7 were fatal. The average American uses 40lbs. of toxic cleaners every year.

The fumes released from these cleaners lead to an increase in asthma diagnoses in children. Over 90% of poisonings happen inside the home, with bleach as the number one chemical involved.

Stay away from words like:

- Flammable
- Warning Corrosive
- Danger
- Reactive
- Poison
- Toxic
- Harmful if swallowed
Read every label and stay away from these chemicals:

- sodium hydroxide
- hydrochloric acid
- butyl cellosolve (2-butoxyethanol)
- formaldehyde
- bleach (sodium hypochlorite)
- ammonia
- sulfamic acid
- petroleum distillates
- sulfuric acid
- lye (potassium hydroxide)
- morpholine

You can search for toxins by brand or by chemical as well as find out the health effects at the National Institute of Health’s website:

www.householdproducts.nlm.nih.gov/ingredients.htm

A Green Cleaner is:

- non-toxic
- hypoallergenic
- biodegradable
- chlorine free
- phosphate free
- natural

*Ounce for ounce a homemade green cleaner is 1/10 the price of its corresponding commercial product*

Look for
- grain alcohol
- coconut/plant oil
- plant oil disinfectants:
- eucalyptus, rosemary or sage

Instead of
- butyl cellosolve
- petroleum
- triclosan

Vinyl Cleaner
1/4 cup vinegar
1/4 teas. vegetable oil-based liquid soap
water.
Saturate a cloth and apply.

Leather Cleaner
1/4 cup olive oil
a few drops of lemon oil.
Mix ingredients. Saturate a cloth and apply.

Carpet and Upholstery Stain Removers
Club soda
Apply to the stain and scrub.
OR
1/4 cup vinegar
1/4 cup water
Mix and rub. Rinse with water. Works well on tough stains including grass, perspiration, rust, jam, coffee, orange juice, wine, beer, ketchup, barbecue, chili, urine and pet stains.
OR
1/4 cup liquid detergent
1 1/2 cups water
Mix and pour into a squirt bottle. Use sparingly and rub on stain.
Living Room

- **Furniture Cleaner**
  For Wood:
  1/8 cup linseed oil
  1/8 cup vinegar
  1/4 cup lemon juice
  Mix ingredients. Using a soft cloth, rub into wood
  OR
  3/4 cup olive oil
  1/4 cup vinegar
  Mix ingredients. Using a soft cloth, rub into wood.
  OR
  1/4 cup olive oil
  1/8 cup lemon juice
  Mix and apply a thin coat. Rub with cloth.

- **Furniture Polish**
  3/4 cup oil (olive or jojoba)
  1/4 cup vinegar or lemon juice
  Combine in a glass jar. Dab a soft rag and wipe onto wood surface. Use the clean side of the rag to buff.
  Cover the jar and store for indefinite use.

- **Carpet Deodorizer**
  Sprinkle baking soda on carpet and let sit overnight. Then vacuum.
  OR
  Mix 1 cup Borax with 2 cup cornmeal. Sprinkle over carpet, let sit for an hour and then vacuum.

Ingredients and Their Uses

- **Baking Soda** (sodium bicarbonate)
  Excellent odor absorbent, a mild abrasive and a degreaser. It serves as a mild alkali and great for septic systems. Found in the baking section of the grocery store

- **Borax**
  A strong alkaline, eye irritant and toxic if swallowed. Keep all borax-containing cleaners out of reach of children. Found in the laundry detergent section of the grocery store. This naturally occurring mineral is a deodorizer, disinfectant, soap booster, stain remover and mold growth inhibitor.

- **Castile Soap**
  This vegetable-oil-based liquid soap contains disinfecting properties. Found in most health food stores. Dr. Bronners is a popular brand.

- **Hydrogen Peroxide**
  Use the household concentration (3%) typically found in pharmacies. This is a whitening agent, and is an antiseptic, useful in kitchens and bathrooms.

- **Powdered Milk**
  This mild cleanser softens skin
• **Pumice**
  This is a mix of glass and mineral formed during volcanic eruptions. It is a great exfoliate and acts as an abrasive cleaner and stain remover.

• **Salt**
  This mineral brightens carpet and acts as a non-scratching abrasive cleaner and inhibits bacteria growth.

• **Vitamin C**
  This is a preservative and mild cleaner.

• **Vinegar**
  Use as a degreaser, emulsifier, and mold growth inhibitor. Removes soap scum and mineral deposits and acts as a deodorizer. It also contains disinfecting properties. Use only white distilled vinegar for these recipes.

• **Washing Soda**
  (sodium carbonate)
  It is slightly caustic and a great grease cutter. Don’t use it on waxed floors (unless you want to remove the wax), fiberglass or aluminum. Found in the laundry detergent section, made by Arm and Hammer.

*NOTE: These ingredients may be toxic in their concentrated form. When used in small amounts in these cleaning recipes, they are non-toxic.

• **Spot Cleaning:**
  Put 1/2 cup baking soda into a bowl and add water until it has the consistency of frosting. Scoop onto a sponge and wash. Use a toothbrush if needed.
  OR
  Use 2 parts water to 1 part vinegar for hard water spots or filmy residue. Use full strength vinegar for small, heavily soiled areas.

• **Antiseptic Soap Spray**
  3 T liquid soap
  20-30 drops tea tree oil
  2 cups water
  Mix in a spray bottle and apply
  TIP: Hydrogen peroxide (3%) by itself may also be used as a mild antiseptic.

• **Bathroom Deodorizer**
  1 lb box baking soda
  10-20 drops essential oil
  Mix oil in baking soda. Place open box under sink or near toilet. Add more essential oil as needed. Replace baking soda every 3 months. Use the old baking soda in cleaning recipes.

• **Plastic Shower Curtain:**
  2 cups water
  Laundry detergent
  Machine launder along with a few towels. Remove before spin cycle. Air dry. To keep clean, spray weekly with a mixture of borax and water.
• Toilet Bowl Cleaner
  Use tub and tile cleaner above
  OR
  Add 1 cup of white vinegar to the bowl and then a handful of baking soda. Let it bubble for 10-15 minutes and then scrub normally. That night add 2 1000mg vitamin C tablets into the bowl. In the morning scrub it one more time for a nice shine.
  OR
  1/4 cup borax
  Sprinkle on a wet bowl brush, scour and rinse. Clean bowl thoroughly and often.

• Mold and Mildew
  Equal parts vinegar and water
  Spray and wipe clean

• Scouring Powder
  1 cup baking soda
  1/4 cup vinegar
  Mix in small bowl and rub on surface with damp sponge. Let stand a few minutes. Rinse well.

• Glass Shower Door
  Use diluted liquid detergent to scrub down the doors. Use a nylon scrub pad or steel wool if needed.
  Keep a squeegee in the shower and wipe it down after every use to avoid heavy buildup.

• Mineral Deposits/Shower Head
  Boil your shower head for 15 minutes in a solution of 1/2 cup white vinegar and 1 qt. water.
  If the shower head is plastic, soak in equal parts of white vinegar and water for one hour.
  For faucets, soak a cloth in hot white vinegar and lay it around the area. Let it sit for one hour and then wipe off.

 Essential Oils

Essential Oils have many properties to help defend your house against germs and have been used as natural remedies for thousands of years.
They can be combined with other ingredients such as baking soda, castile soap, and vinegar to make a great smelling recipe to keep your home clean.

Antifungal
  Cedarwood
  Eucalyptus
  Lavender
  Lemon
  Patchouli
  Tea Tree (currently in the process of being registered as a disinfectant in this country)

Antibiotic
  Chamomile
  Cypress
  Lavender
  Lemon
  Sweet Orange
  Peppermint
  Spearmint
  Tea Tree

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Antibiotic (cont)
Chamomile
Eucalyptus
Lavender
Lemon
Patchouli
Tea Tree

Antiseptic
Cedarwood
Grapefruit
Juniper Berries
Lavender
Lemon
Patchouli
Spearmint

Proper disposal of Household Hazardous Waste
Specific regulations to properly dispose of hazardous materials vary. Please contact the disposal facility in your area to find out how you can help. Local facilities hold regular HHW days at no charge.

Antibiotic (cont)
Chamomile
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Silverware
Soak overnight in a pan with equal parts milk and vinegar. Then rinse in soap and hot water and polish dry.

Jewelry/Silver
Plain white toothpaste (not gel)
Scrub on with a toothbrush. Rinse with soapy water.

Bathroom

Homemade Soft Scrub
1 2/3 cup baking soda
1/2 cup castile soap
1/2 cup water or strong herb tea
2 T. vinegar
8-10 drops essential oil
Mix together baking soda and soap, stir well, and slowly add water and essential oil, add vinegar last. Pour into flip top bottle and shake well before use.

Tub/Tile Cleaner
1/3 cup baking soda
1/3 cup borax
1 teas. vegetable based soap
Mix and add enough water to make a paste. Apply with sponge or scubbie. Rinse well after use.

Bathroom suggestions continued on next page
**Metal Cleaners**

- **Brass and Copper**
  flour (enough to make a paste)
  1/2 teas. salt
  1/2 cup vinegar
  Mix ingredients to form a paste. Rub onto the brass and let sit for 30 min (or longer for heavy tarnish). Rinse with water and dry with a cloth dampened with a little vegetable oil.

- **Chrome**
  3 teas. baking soda
  water
  Mix the baking soda and water to make paste. Apply with sponge. Rinse.

- **Pewter**
  Rub with a cabbage leaf to shine. Do not eat or compost the cabbage leaf after use; throw it away.

- **Silver**
  plain white toothpaste (not gel)
  Rub into tarnished silver with a cloth. Rinse with warm soapy water and buff dry.
  OR
  3” square aluminum foil
  1 T salt
  1 T baking soda
  1 cup warm water
  Dissolve salt and baking soda in warm water. Submerge the foil and silver in the solution. Wait one hour. Rinse silver and wipe dry with a soft cloth.

**Laundry**

**Laundry Soap**
Use non-phosphate detergent.
TIP: Add 1/2 cup borax or washing soda to the wash cycle to boost cleaning for heavily soiled clothes.

**Fabric Softener:**
Vinegar: Add 1-2 cups of vinegar to rinse cycle to deodorize and soften fabrics.

**Laundry Bleach**
Hydrogen peroxide (3%): Spot clean. Let dry. Repeat if necessary
OR
Presoak in mixture of 1/2 cup borax in 2 gallons of hot water
OR
1/4 cup white vinegar to wash cycle to help prevent graying.

**Laundry Starch:**
1 T cornstarch
1 pint cold water
Place in spray bottle and shake to dissolve cornstarch.

**Diaper, Garbage or Compost Pail Deodorizer:**
1 cup baking soda
1 teas. tea tree oil and/or other essential oil
Mix and work out all lumps with a fork. Sprinkle on bottom of pail after liner is removed. Periodically rinse pail with vinegar and water and dry in the sun.
**General Stain Remover**
1/4 cup liquid detergent
1/4 cup glycerin
1 1/2 cups water

*Mix and pour into a squirt bottle. Use sparingly.*

OR

Equal Parts vinegar and water

*Mix and use to remove tough stains including grass, perspiration, rust, jam, coffee, orange juice, wine, beer, ketchup, barbecue sauce, chili, urine and pet stains.*

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**Spot cleaning**

- **Blood**
  Soak stain in cold water, then rub liquid soap or detergent into it and rinse in cold water. If necessary, apply hydrogen peroxide to the stain for no more than 5 minutes and rinse again in cold water. Rub liquid soap or detergent on the stain again and wash in warm water.

- **Crayon/Wax**
  Scrape off the solid wax. Place the fabric between two sheets of tissue, and use a warm iron to draw the wax out.

- **Grass**
  Soak in cold water. Then sponge with isopropyl alcohol, but test in a hidden area first.

- **Gum**
  Use ice cubes, or place fabric in freezer to harden gum. Scrape off or remove what you can.
  Soak in a stain remover, such as salt water, air dry, wash as usual.

- **Ink**
  Apply isopropyl alcohol to the area around the stain and then the stain itself. Place the fabric stain down on a towel to blot. Sponge alcohol into the stain and rinse.

- **Vinyl Floors**
  Add 1/2 cup, white vinegar to a bucket of warm water. If the floor is really dirty, clean first with a squirt of dish detergent and water, then use the vinegar mix.

- **Tile and Wood Floors**
  1 cup vinegar
  1 pail hot water
  *Mix and apply.*

- **No Wax Floors**
  1/4 cup vegetable oil based liquid soap
  1/4 cup lemon juice or vinegar
  2 gal. hot water
  *Mix and apply.*

- **Linoleum Floors**
  Add a small amount of skim milk to the rinse water. This will shine the floor. (No, it doesn’t smell)

- **Wood Floor Polish**
  3/4 cup olive oil
  1/4 cup vinegar
  10 drops essential oil (optional)
  *Mix and apply.* Wipe clean.

- **Floor Wax**
  1 part lemon juice
  2 parts food grade linseed oil
  *Apply with rag. Let rest until floor is dry*  
  *Buff completely smooth*  
  OR  
  6 T beeswax,  
  3 cups food-grade linseed oil  
  *Put ingredients in the top of a double boiler (over water) and beat slowly until wax is melted. Stir and pour into a heat resistant container. Apply.*
• **Windows/Glass**
  In a spray bottle mix a 50/50 solution of white vinegar and warm water. Spray on and wipe off with newspaper.
  OR
  2 T borax or washing soda
  Mix ingredients. Apply to surface with newspaper. Wipe clean.
  TIP: For fingerprints, use 1 T. lemon juice with 1 qt. vinegar water

  **Spot Cleaning**

• **Cutting Boards**
  Use a 5% straight vinegar solution. Rub it on and leave it for a few hours or overnight. After it is wiped off, the smell will dissipate. This also works well for toilet rims.

• **E Coli/Salmonella**
  Use hot soapy water to wash anything that has touched raw meat.

• **Counter Stain**
  Apply lemon juice and let sit for 45 minutes.

  **Floor Cleaners**
  Make sure to sweep and vacuum frequently to avoid heavy soiling.

• **All purpose**
  2 T liquid soap or detergent
  1 gal. hot water
  Mix, mop and wipe clean

  TIP: To remove scuff marks, sprinkle with baking soda and spray with equal parts vinegar and water. Wipe clean.

• **Leather**
  **Water Stains**: Rub fabric with a cloth of equal parts white vinegar and water
  **General Cleaner**: 1/4 cup olive oil with a few drops of lemon oil or vinegar. Mix ingredients. Saturate cloth and apply. DO NOT USE ON SUEDE.

• **Butter or Cooking Oil**
  Use talcum powder or cornstarch to first soak up the grease. Then rub shampoo on the stain and wash it in the hottest water the fabric can stand.

• **Perspiration**
  Sponge with a weak solution of white vinegar or lemon juice with water. Wash as usual.

• **Shoe Polish**
  Scrape off what you can and then clean with equal parts water and isopropyl alcohol. Use straight alcohol with white fabrics. Then wash as usual.

• **Soda**
  Soak stain in cold water and then apply an equal mix of isopropyl alcohol and water. Air dry. Do not use hot or warm water on sugary stains. Wash and rinse in cool water only.

• **Tea**
  Do not let dry. Stretch fabric over a bowl. Pour boiling water from a height of two to three feet.

  If stains persist try using Borax or a Non-Chlorine Bleach such as:
  Bio Pac - Ecover - Naturally Yours
  - Shaklee- Seventh Generation
Kitchen

- **All purpose cleaner:**
  2 T vinegar
  1 teas. borax or washing soda
  2 cups hot water
  1/4 cup liquid soap
  Mix everything but soap in a spray bottle and shake. Add 1/4 cup liquid soap last. Mix gently. Apply and wipe clean. Good for counters, woodwork, appliances, etc.

- **Dish Soap**
  Use non-phosphate detergent.
  Tip: use half the recommended amount of detergent in your automatic dishwasher.

  **Plain castile Soap**
  10-15 drops of your favorite essential oils for added disinfecting power! (e.g. lemon, rosemary, lavender, orange) Mix together and use when washing dishes by hand.

- **Drain Cleaner**
  1/2 cup baking soda
  1/2 cup vinegar
  Pour baking soda down drain followed by vinegar. Let it bubble for 15 min. then pour down a teakettle full of boiling water.
  OR
  1/2 cup salt
  1/2 cup baking soda.
  Pour salt down the drain, followed by baking soda. Follow with 6 cups boiling water. Let sit overnight; flush with water.
  For stubborn clogs use a plunger or mechanical snake.

- **Oven**
  Sprinkle water generously over the bottom of the oven. Then cover with baking soda until white and leave over night.
  TIP: Sprinkle salt on spills while oven is still warm. When oven cools, scrape and wipe the area clean.

- **Scouring powder**
  Baking soda.
  Pour in shaker and sprinkle in sink or on pans. Scrub with a rough pad and rinse.
  When oven cools, scrape and wipe the area clean.

- **Scouring Paste:**
  2/3 cups baking soda
  1/2 cup liquid soap or detergent
  water
  2 T vinegar
  Mix everything except vinegar to form a paste. Add vinegar and stir. Keep paste in a tub at the kitchen sink for scouring pots and pans or the sink itself.
  Wipe off in the morning and use a drop or two of liquid detergent to remove any residue. Use steel wool if needed.

- **Stain Remover:**
  Salt
  juice of lemon or lime
  Sprinkle surface with salt and squeeze lemon or lime juice over the area. Let sit and rub out. This can even remove rust if allowed to sit a few hours.
  TIP: A wet pumice stone can remove tough stains from porcelain or enamel without scratching.