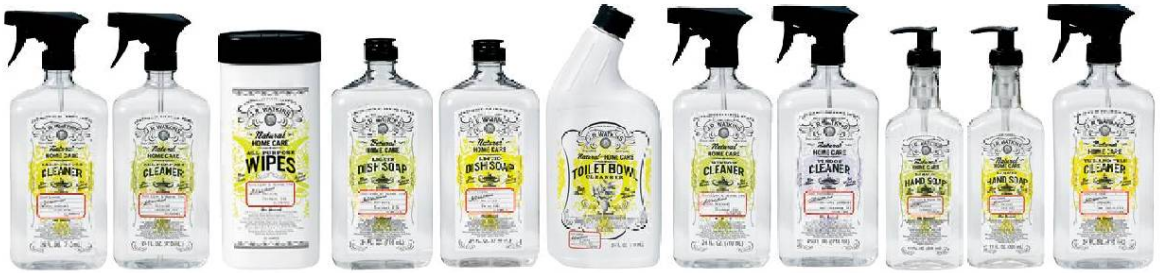

J.R. WATKINS
Since 1868
TRADE MARK
Natural
HOME CARE
Scent.
Contains.
No.
Natural Home Care
A more mindful way of caring for your home



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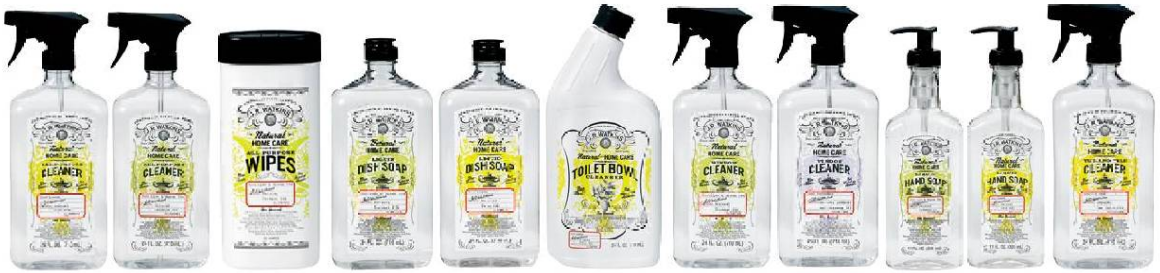
Why are *natural* home care products important?

- Cleaning products are released into the environment inside your home and down the drain to the outdoors.
- 37% of Americans suffer from chemical sensitivities, skin rashes and allergies. Many of them provoked by chemicals in cleaning products.
  - Reactions can include; eyes watering, breakouts, skin rashes, coughing or sneezing uncontrollably.
- Asthma is the leading cause of emergency room visits and absenteeism in schools.
- Children breathe faster in proportion to their body weight than adults, making them more vulnerable to chemical exposure.
- Warm baths and showers open pores so that what we have cleaned with is more readily absorbed.



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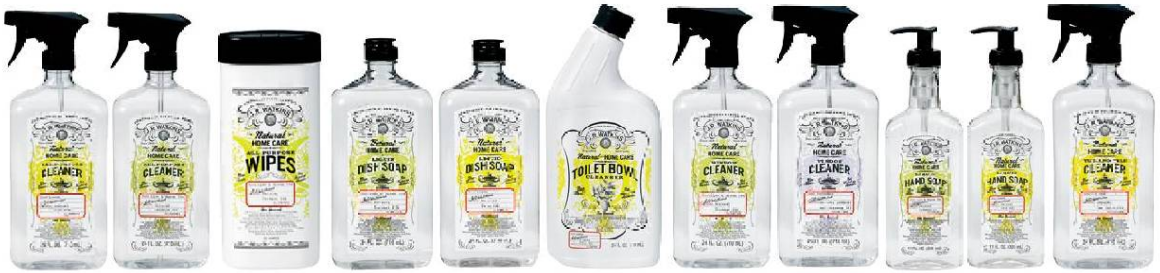
Why is *indoor air quality* important?

- 90% of our time is spent indoors.
- Triple pane windows and high efficiency insulation make it harder for indoor air to escape.
- EPA reports that air pollution in our homes is up to five times worse inside than outside.
- Indoor pollutants come from all sorts of chemicals we use to make our lives easier every day—carpets, furniture, household cleaners and personal care.
- The EPA ranks indoor air quality among the top five risks to human health.



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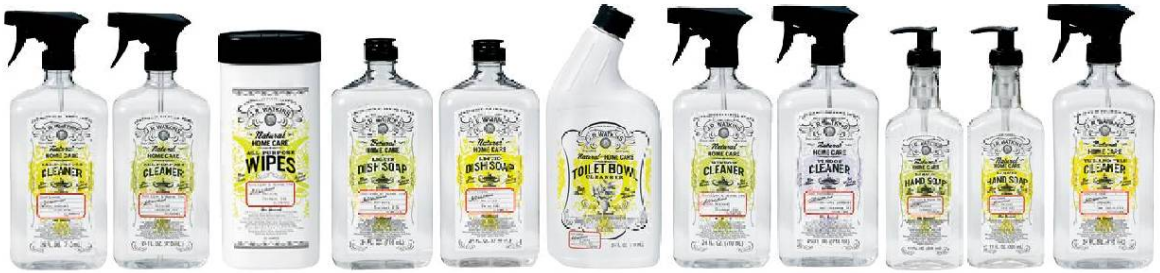
How do cleaning products *clean*?

- Surfactants are the chemicals in the formula that create the cleaning action.
- Surfactant stands for Surface Active Agent.
- Surfactants can be plant-based or petroleum-based.

How does a surfactant *work*?

- One end of the surfactant molecules bond to dirt while the other end bonds to water. As more surfactant molecules attach to the dirt they “roll up” the dirt and lift it from the surface into the water.
- Surfactants reduce the surface tension of water so bubbles can form without collapsing.
- Reducing the surface tension of water allows water to mix with oil and grease.



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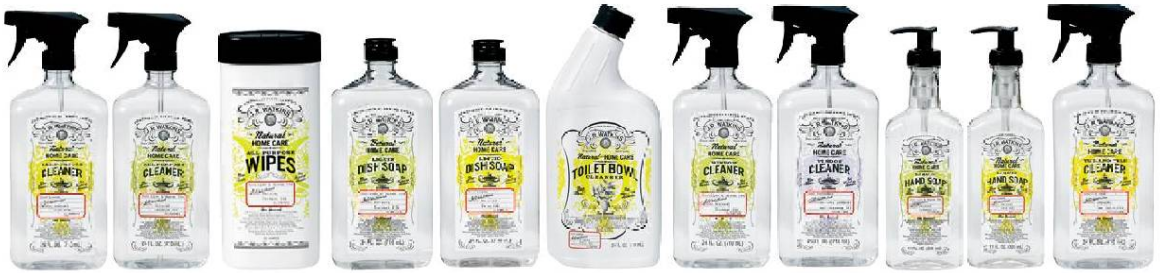
Why don't J.R. Watkins plant-based cleaners *disinfect*?

- Experts believe using disinfecting cleaners creates "super germs."
- Research suggests that disinfecting enables germs to build a resistance and come back even stronger/bigger.
- Health experts believe the chemicals used in the products to kill the germs are just as harmful as the germs themselves.
- 90% of people who use antibacterial cleaners don't allow the formula to penetrate the surface. By spraying and immediately wiping, consumers don't get the disinfecting properties of the cleaner. Disinfectants need to sit 10 min.
- The best way to keep germs at bay is with regular soap and water. Regular cleaning is the best ways to disinfect your home.



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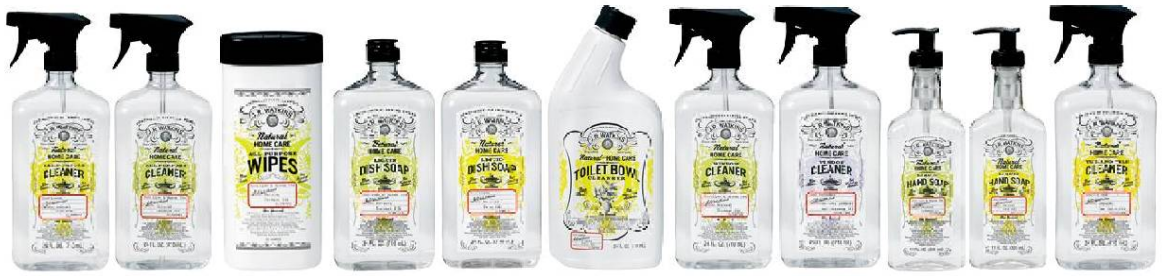
What are the *basics* of every cleaning formula?

- **Builders**: A builder is an additive that increases the cleansing action of soaps and detergents. Phosphates are a popular builder which soften hard water.
- **Propellants**: A compressed inert gas that works to discharge the contents of an aerosol container. These eye, throat and respiratory irritants can aggravate asthma, cause other lung diseases and deplete the ozone layer.
- **Solvents**: Solvents are substances which aid in cleaning by dissolving and breaking down dirt. They also prevent the separation of ingredients. Naphtha, ethanol and propylene glycol are all popular solvents.
- **Preservatives** - Preservatives slow the aging and decay of a product. The most famous and widely used preservative is formaldehyde.
- **Antimicrobial Agents** - Antimicrobial or antibacterial agents kill or inhibit the growth of bacteria and other micro-organisms that can cause diseases.



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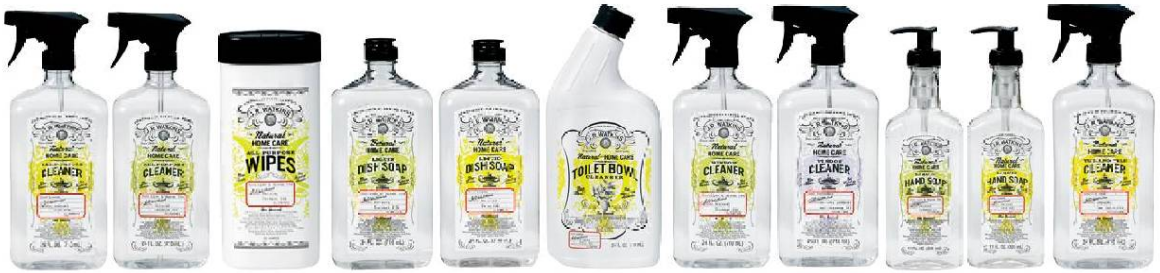
What are *Synthetic Compounds*?

- Common synthetic compounds found in traditional chemical-based cleaning products include:
  - **Petro Chemicals**: Production of petro chemicals releases more than 492 million pounds of air pollutants into our atmosphere a year. Includes petroleum distillate and naphtha.
  - **Trihalomethanes**: Toxic by-products of chlorine disinfected water, may cause more than 10,000 cases of cancer a year.
  - **Polychlorinated biphenyl's** (PCB's): A chlorine based chemical compound that has been banned by the Department of Health and EPA because they are carcinogenic.



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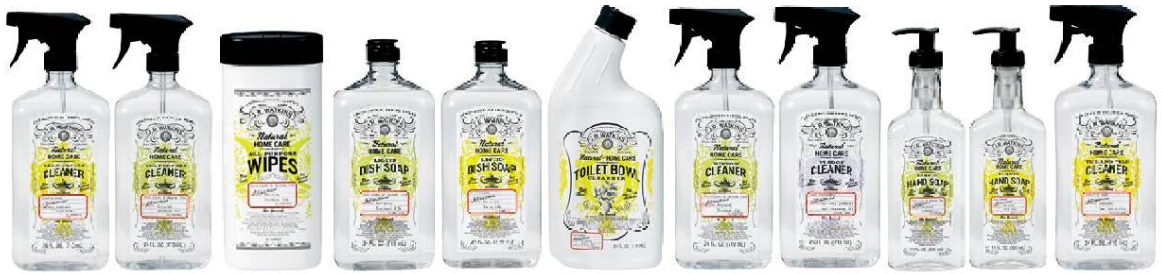
What's the difference between cleaners that are *plant-based vs. petroleum based*?

- Studies have shown that making household cleaners from plant-based materials uses less energy than making the same cleaners from petroleum.
- Using less energy helps reduce emissions of greenhouse gasses.
- If every household in the U.S. replaced just one bottle of 24 oz. petroleum-based dishwashing liquid with our 24 oz. plant-based product, we could save 85,886 barrels of oil!
  - That is enough to heat and cool 4,941 U.S. homes for a year!



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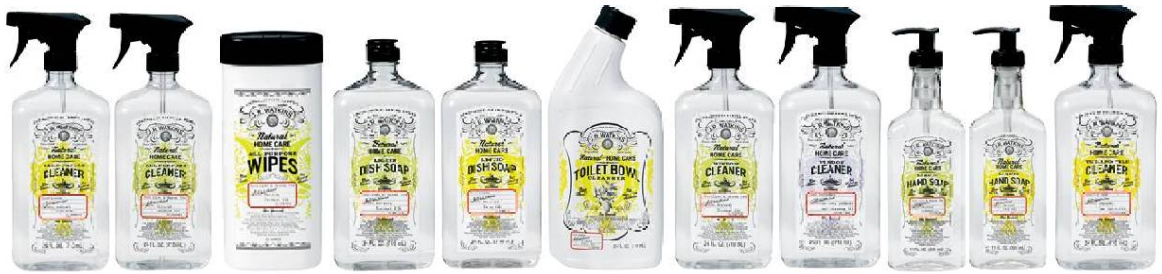
What are *Volatile Organic Compounds (VOC's)*?

- Volatile organic compounds are chemicals that have high enough vapor pressures to vaporize at room temperature and enter the atmosphere.
- VOC's include chemicals such as methylene chloride or sulfer.

What do VOC's *do?*

- When VOC's are released into the environment, they can damage soil and groundwater.
- Vapors of VOC's escaping into the air contribute to air pollution.
- Exposure can cause eye, nose, and throat irritation as well as headaches, loss of coordination and nausea.



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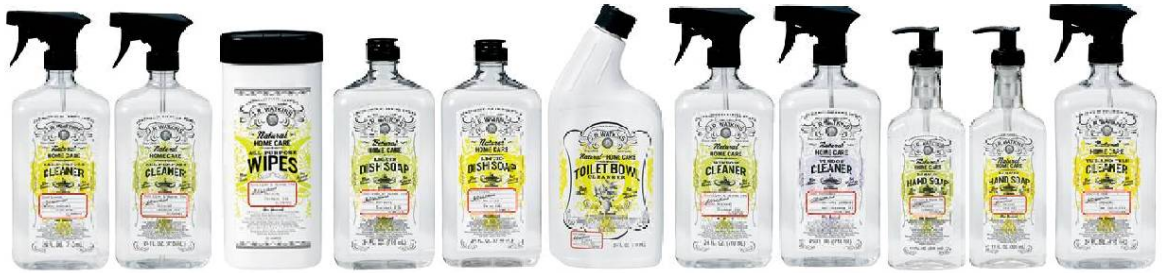
What are *Polychlorinated Biphenyls (PCB's)*?

- Polychlorinated biphenyls (PCB's) are a class of organic compounds with 1 to 10 chlorine atoms.
  - Any chlorinated cleaning product likely contains PCB's.
- PCB's are an environmental containment and are harmful to animals and plant life.

What do PCB's *do?*

- PCB's are classified as persistent organic pollutants which bioaccumulate in animals.
- Much of the Great Lakes area is heavily polluted with PCB's. In some areas, the consumption of locally caught fish is restricted due to contamination.



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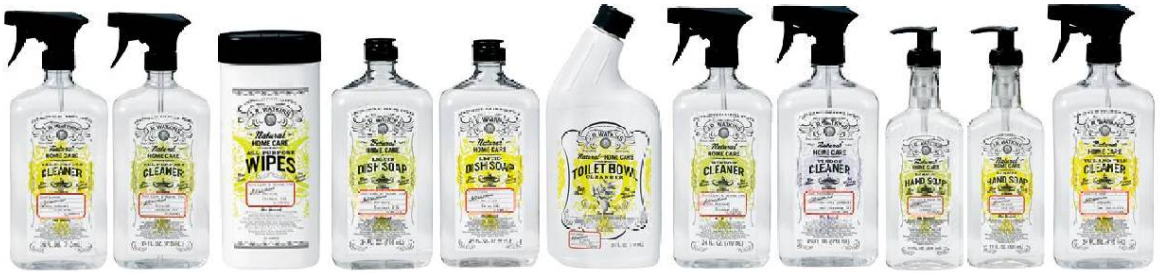
What are *Phosphates*?

- Phosphates in traditional detergents serve as a “builder” to improve cleaning efficiency. Builders, such as Sodium Tri Poly Phosphate (STPP), help clean and work well in “hard” waters that contain calcium and magnesium ions.
- Phosphates strong cleaning performance has been overshadowed by their harmful effects on rivers, lakes, streams, and other fresh waters.

Why does phosphate-free *matter*?

- When phosphates end up in lakes and rivers (usually as runoff), they promote rapid and unnatural plant and algae growth, killing off other aquatic life.
- Excessive algae growth can jeopardize the life cycle of rivers, lakes and streams. Sending them on an accelerated path to someday becoming dry land.
- By not using phosphates in our products, we are helping to keep waterways in a healthy balance.



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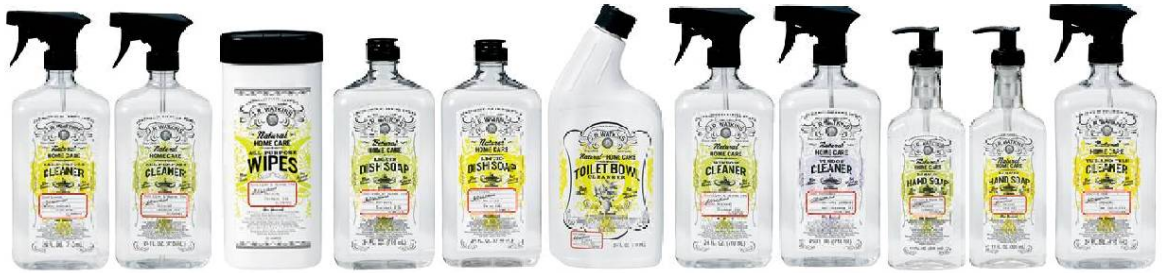
When you see the *DFE logo*, what does it mean?

- The DFE logo means that the EPA's scientific review team has screened each ingredient for potential human health and environmental effects.
- The product contains only those ingredients that pose the least concern among chemicals in their class.
- This logo allows consumers to quickly identify and choose products that can help protect the environment and are safer for families.
- Many stakeholders consider DFE partnerships the forum of choice for pressing issues in chemical sustainability and an important agency tool for implementing green chemistry.

Design for the Environment
U.S. EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



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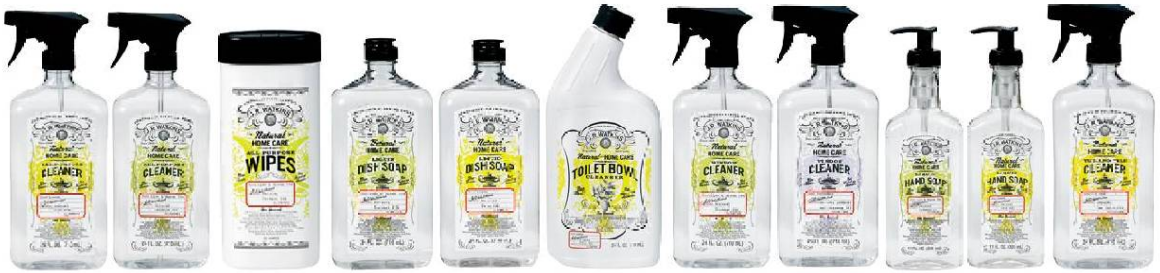
The EPA's *Top Ten Cleaning Ingredients To Avoid*:

1. Alkylphenol Ethoxylates (APEs): common in detergents and disinfectants and are suspected hormone disruptors.
2. Ammonia: poisonous when swallowed, extremely irritating to respiratory passages when inhaled and can burn the skin on contact.
3. Indiscriminate use of antibacterial cleaners containing Triclosan may be contributing to the rise of antibiotic-resistant germs.
4. Butyl Cellosolve (aka butyl glycol, ethylene glycol monobutyl): poisonous when swallowed and a lung-tissue irritant.
5. Chlorine Bleach (aka sodium hypochlorite): an all-purpose whitening agent, can irritate the lungs and eyes and in waterways can become toxic.



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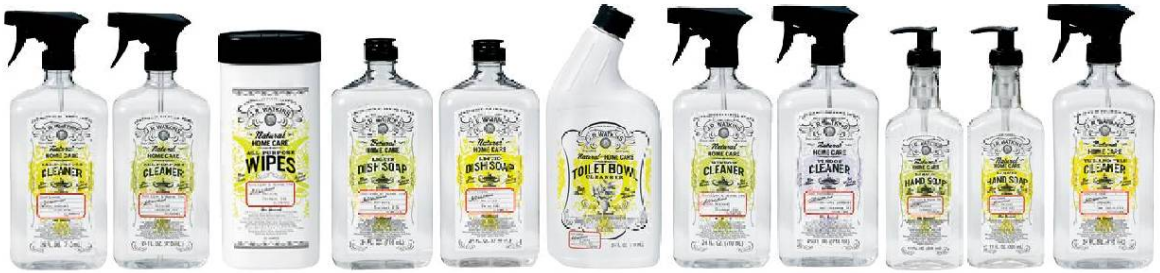
The EPA's *Top Ten Cleaning Ingredients To Avoid*: *(continued)*

6. Diethanolamine (DEA): can combine with nitrosomes (often-undisclosed preservatives) to produce carcinogenic nitrosamines that penetrate skin.
7. Fragrances frequently contain Phthalates, chemicals linked to reproductive abnormalities and liver cancer in lab animals and to asthma in children.
8. Phosphates: soften water for detergents but contribute to algae blooms in our waterways, which can kill off fish populations.
9. Sodium Hydroxide: found in drain, metal and oven cleaners, is extremely irritating to the eyes, nose and throat, and can burn those tissues on contact.
10. Sodium Lauryl Sulfate: a common sudsing agent, can penetrate the skin and cause contact dermatitis.



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J.R. Watkins Natural Home Care "*Freedom Code*"

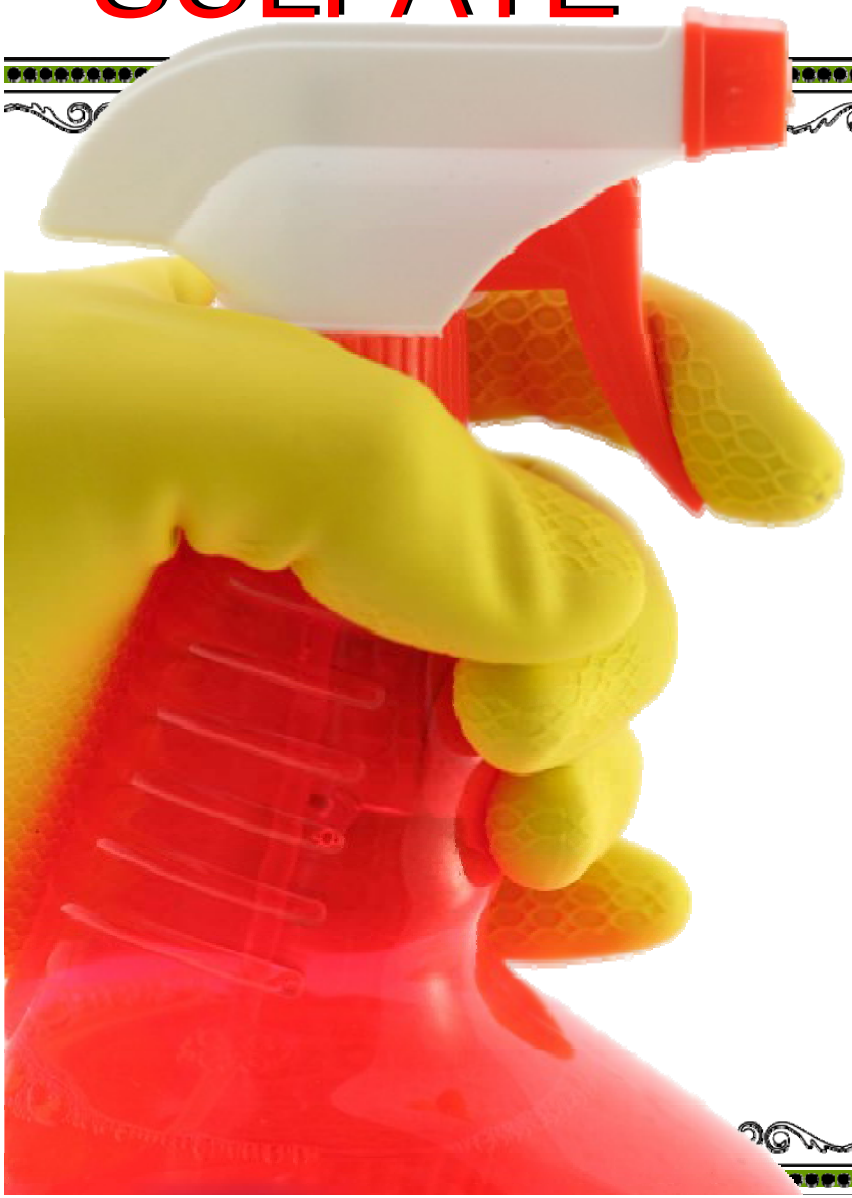
Our products are free of the following chemicals:

- Ammonia Free
- Benzene Free
- Biodegradable
- Boron Free
- Butyl Cellosolve Free
- Chlorine Free
- Diethylene Ether Free
- Dye Free
- Ethyl Cellosolve Free
- Formaldehyde Free
- Isopropanol Free
- Kerosene Free
- Mineral Spirit Free
- Non-toxic
- Petrochemical Free
- Phosphate Free
- Phosphoric Acid Free
- Propylene Glycol Free
- Sodium Lauryl Sulfate Free
- Sulfuric Acid Free

Never Tested On Animals

Contains No Animal Ingredients

AMMONIA, AMMONIUM SULFATE



When inhaled, ammonia can lead to bronchitis or pneumonia with repeated exposure. Also causes skin irritations & burns.

Commonly found in:

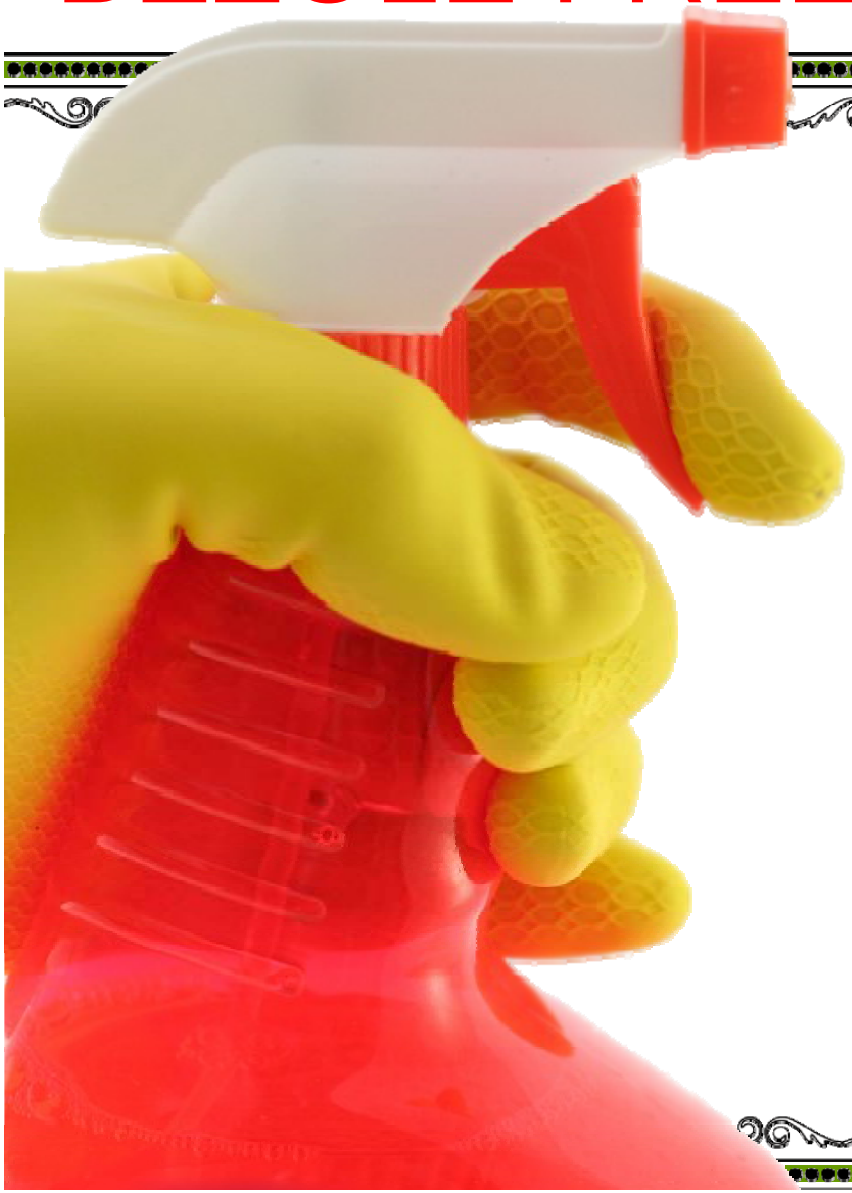
Window Cleaners
All Purpose Cleaners
Automatic Dishwasher Detergents

The Facts:

Ammonia is listed as a toxic chemical on the EPA's Right-To-Know list. It irritates the skin, eyes and respiratory passages causing all sorts of respiratory problems including pulmonary edema.

Ammonia is extremely toxic when inhaled in concentrated vapors and repeated exposure may lead to bronchitis and pneumonia. Ammonia can also cause chemical burns, cataracts and corneal damage.

BENZENE, BENZOL, BEZOLE FREE



Benzene is a petroleum derivative and classified as an air pollutant by the Clean Air Act.

Commonly found in:

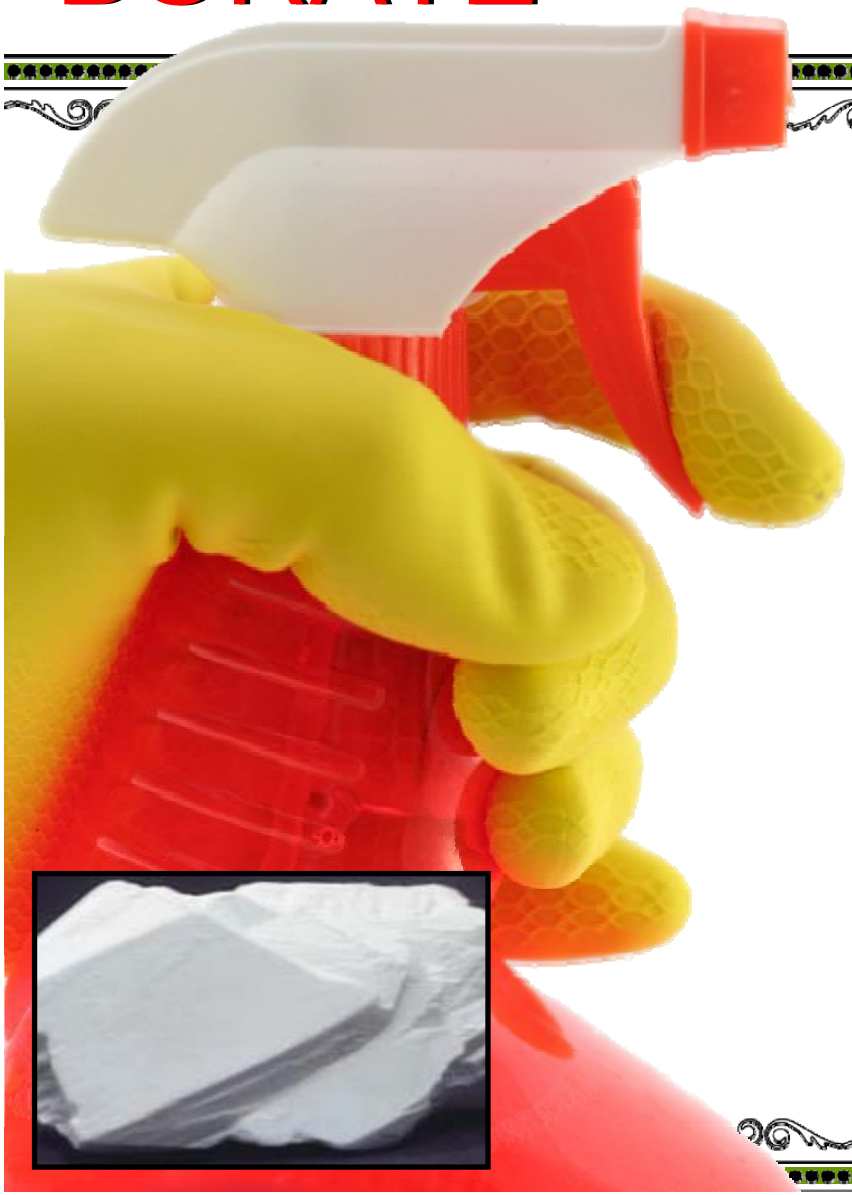
Liquid Laundry Detergent
Automatic Dish Detergent
Furniture Polish
Oven Cleaners
Spot Removers

The Facts:

Vapors from products that contain benzene, such as glues, paints, furniture wax, and detergents, can all be a source of exposure. Benzene is a proven carcinogen with serious health effects.

Benzene exposure can lead to dizziness, headaches, drowsiness and shortness of breath.

BORON, BORAX, SODIUM BORATE



Boron is a water softening agent and performance booster.

Commonly found in:

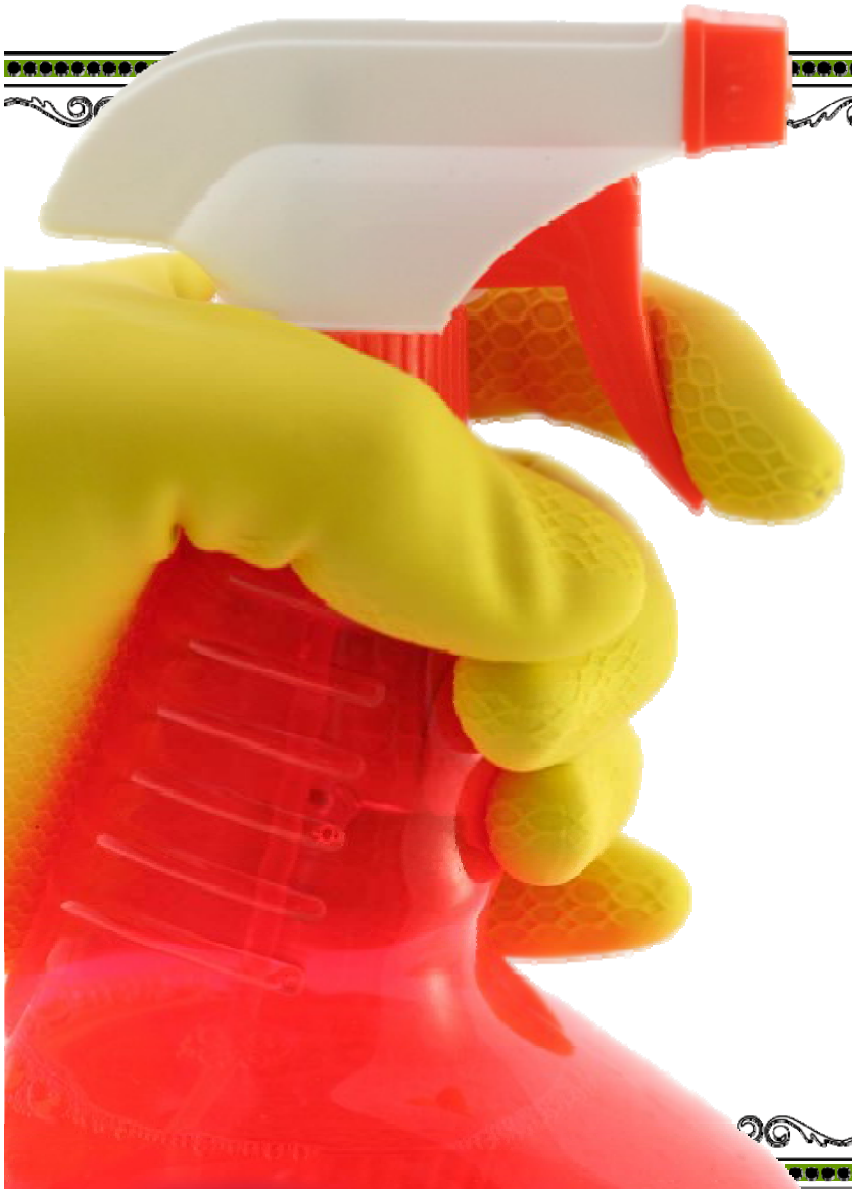
Liquid Laundry Detergents
Stain Removers

The Facts:

The pH of boron produces a basic solution in water, thereby increasing the effectiveness of bleach and other cleaners. Borates bond with other particles to keep ingredients dispersed evenly in a solution, which maximizes the surface area of active particles to enhance cleaning power.

When exposure to small amounts of boron takes place, irritation of the nose, throat or eyes may occur. It takes 5 g of sodium borate to make a person ill and 20 grams or more to put its life in danger.

BUTYL CELLOSOLVE



Butyl Cellosolve is a colorless solvent and disinfectant.

Commonly found in:

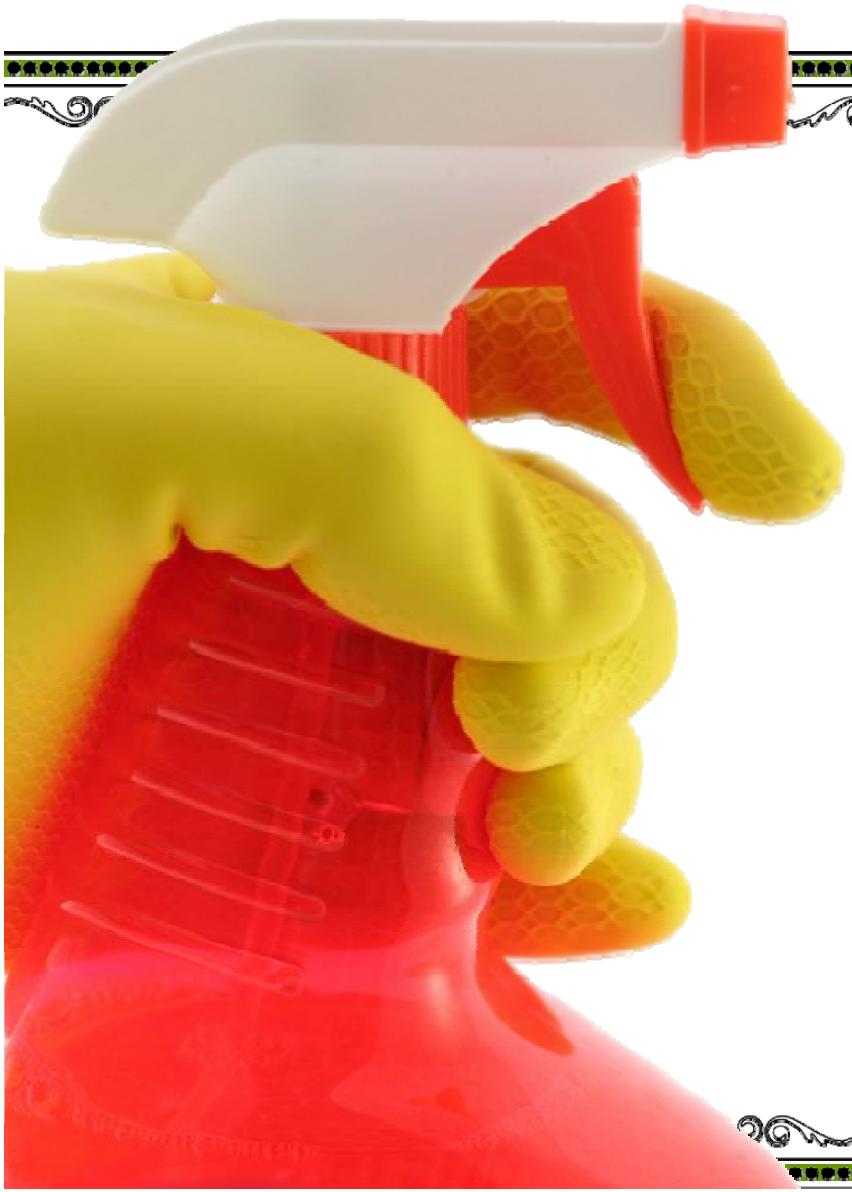
Glass Cleaners
Oven Cleaners
Degreasers
Spot Removers
Air Fresheners
Carpet Cleaners

The Facts:

Also known as butyl glycol, butyl cellosolve has made it onto the list of California's toxic air substances.

Butyl cellosolve is a neurotoxin that depresses the nervous system and can cause a variety of health problems. When airborne it can irritate mucous membranes and cause liver and kidney damage.

CHLORINE



Chlorine is a powerful oxidant used in bleaching and disinfectants.

Commonly found in:

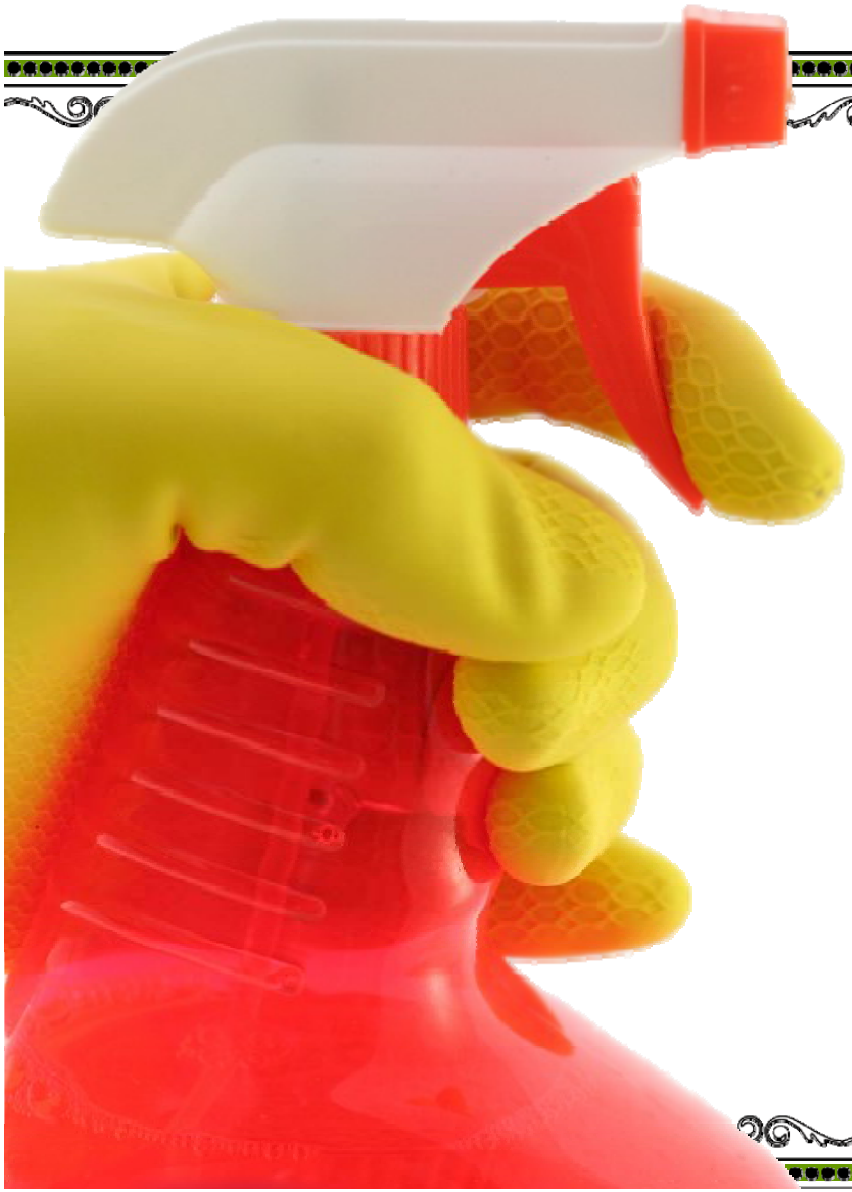
Glass Cleaners
Hard Surface Cleaners
Bleach & Fabric Whiteners

The Facts:

When chlorine and chlorine derivatives are used in industrial processes, they produce substances called chlorinated hydrocarbons. Chlorinated hydrocarbons persist in the environment, accumulate in animals and people, and can be toxic to human and environmental health.

Chlorine is a toxic respiratory irritant that can severely damage the skin, eyes and other membranes.

DIETHYLENE ETHER



Diethylene is a synthetic petroleum based surfactant and solvent.

Commonly found in:

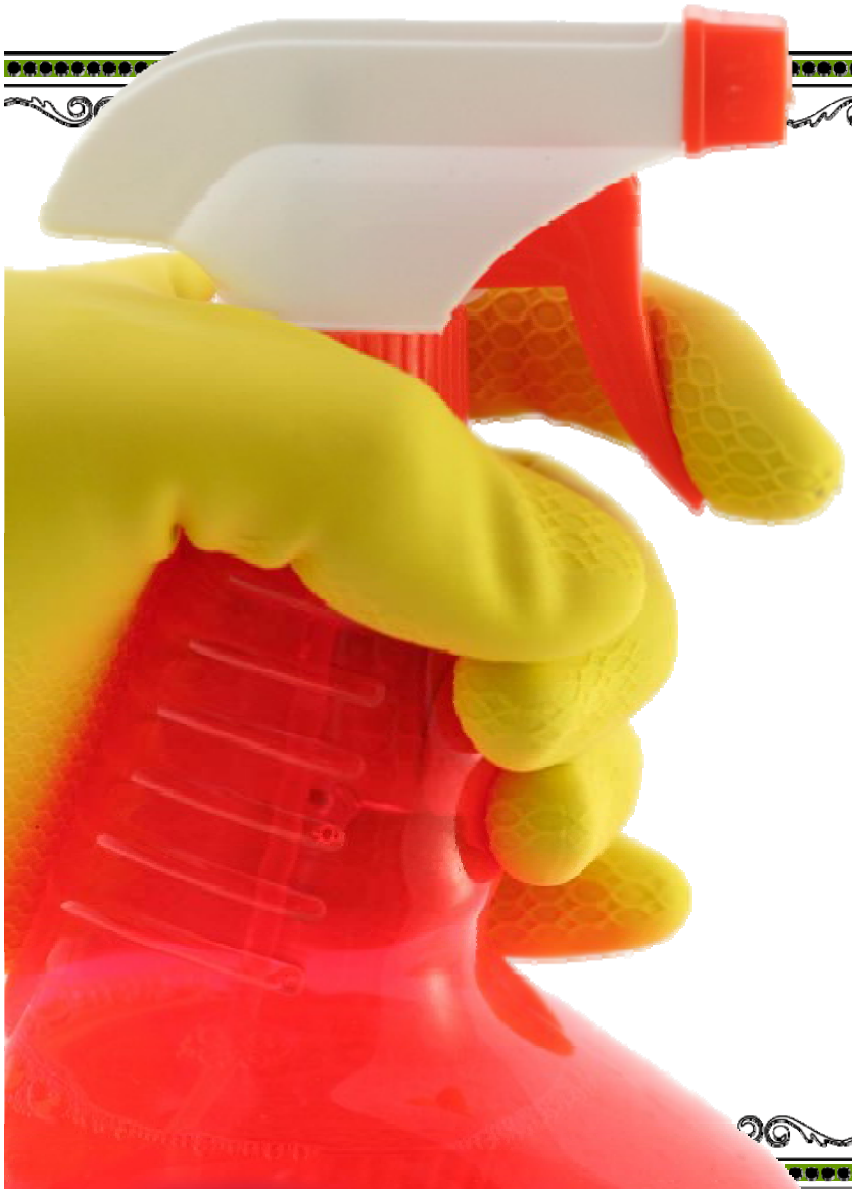
Glass Cleaners
Hard Surface Cleaners
Bleach & Fabric Whiteners

The Facts:

Used to neutralize acids. Often reacts with other nitrites while sitting on the shelf. This reaction leads to the formation of nitrosamines, which are carcinogens.

Diethylene is extremely toxic. Massive poisonings have been attributed to this chemical.

DYES / COLORANTS



Dyes are synthetic colorants used to add color to cleaning formulas.

Commonly found in:

Glass Cleaners

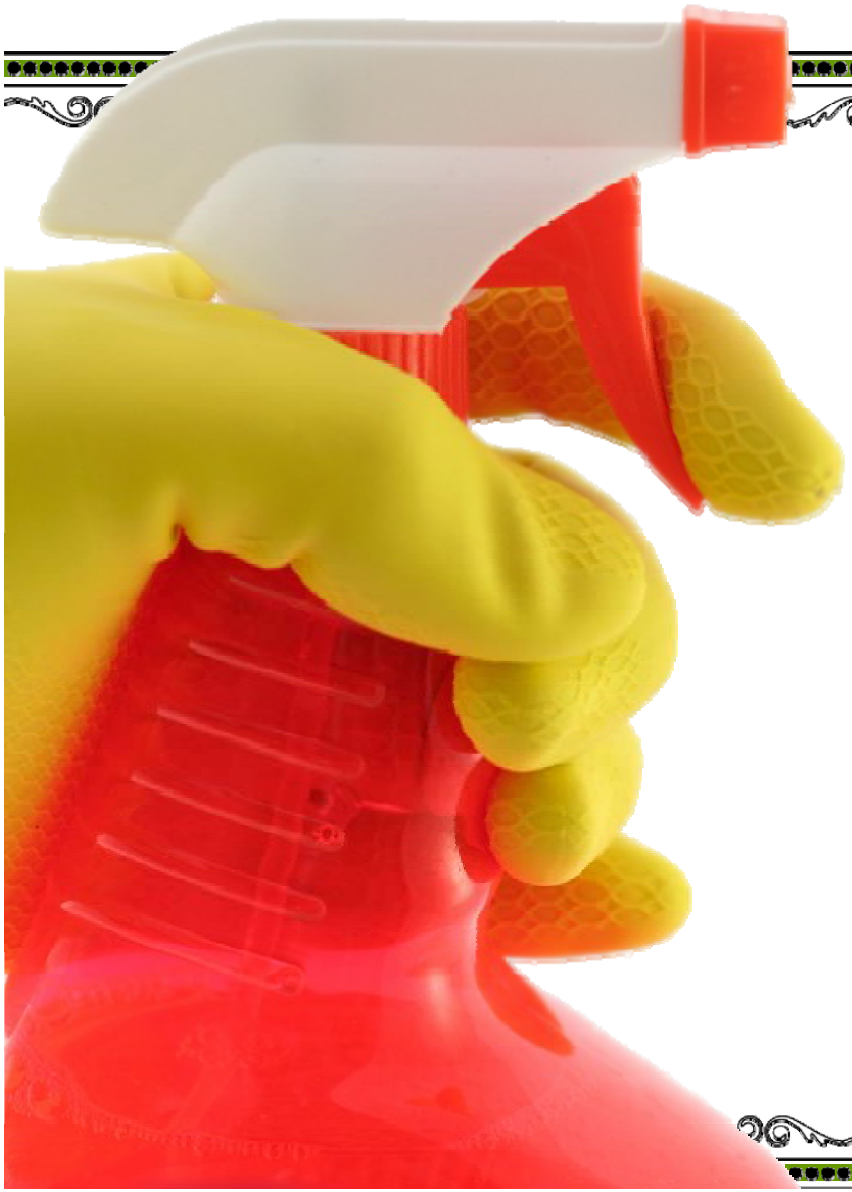
All Purpose Hard Surface Cleaners

The Facts:

Some cleaning products contain dyes to change or enhance the aesthetics of the product. However, the addition of dyes contribute little to the cleaning value. The basic principle of pollution prevention is to avoid unnecessary synthetic additives whenever possible.

Many dyes and colorants are also petroleum based or derived from non-renewable sources.

FORMALDEHYDE



Formaldehyde is an inexpensive preservative and disinfectant.

Commonly found in:

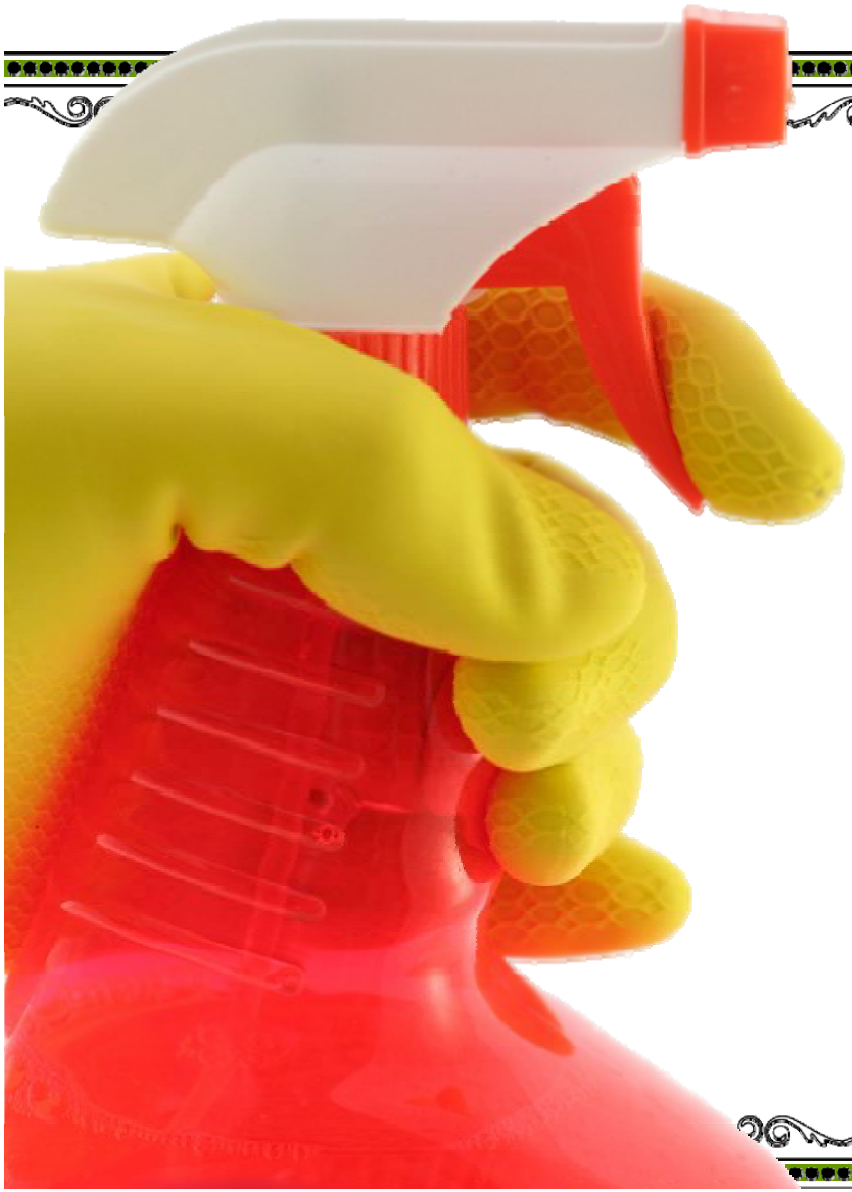
Air Fresheners
Disinfectants/Antibacterial Cleaners
Laundry Detergents

The Facts:

Formaldehyde is a known carcinogen which can severely irritate skin, eyes, nose, throat and lungs when inhaled. Exposure to formaldehyde can lead to skin allergies and asthma attacks.

Formaldehyde is colorless and can cause watery eyes, burning sensations in the eyes and throat, nausea, and difficulty breathing.

ISOPROPANOL



Isopropanol is an inexpensive widely used petroleum-based solvent.

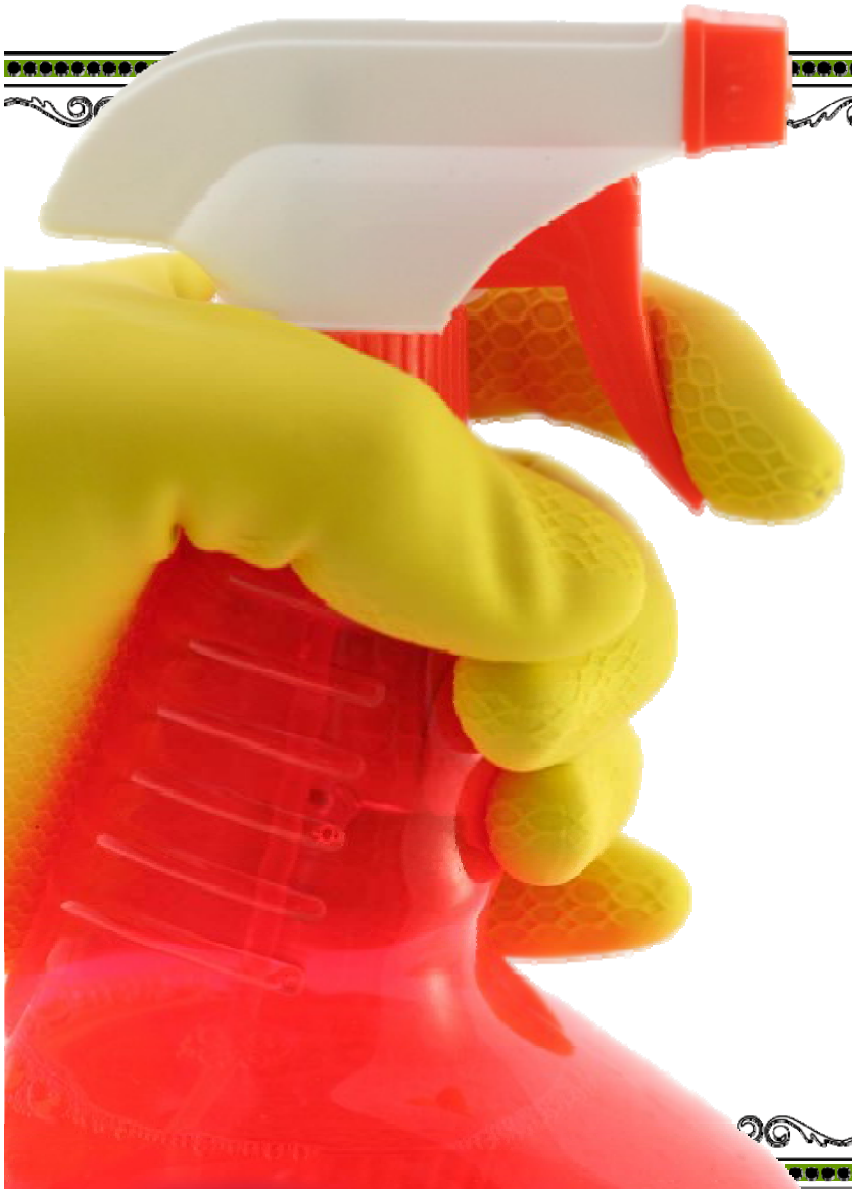
Commonly found in:
Window Cleaners

The Facts:

Long-term exposure to isopropanol can irritate skin, eyes and may cause redness or itching. Short-term exposure can lead to headaches, dizziness and lightheadedness.

Isopropyl alcohol is about twice as toxic as ethanol and can be easily absorbed through the nose, throat or skin.

KEROSENE



Kerosene is a non-renewable petroleum based solvent.

Commonly found in:

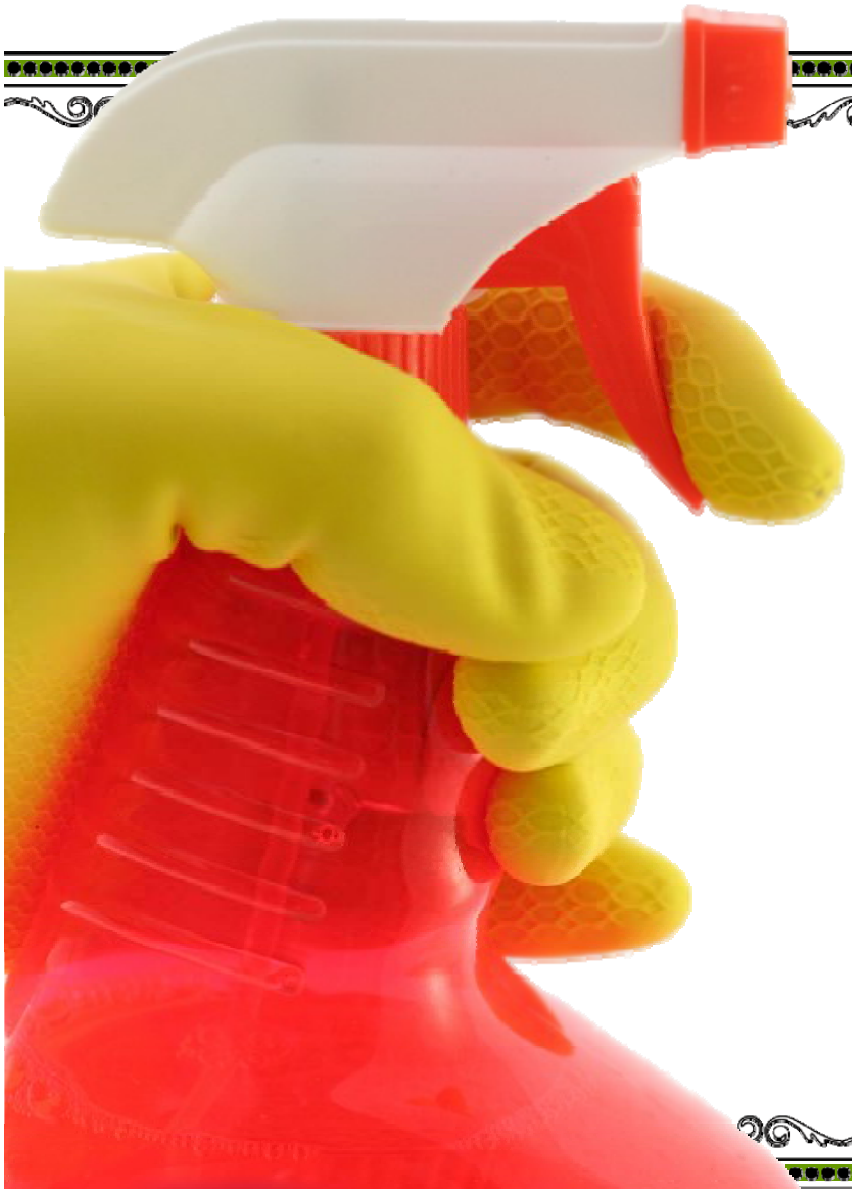
Furniture Polish
Furniture Waxes

The Facts:

Breathing kerosene based products for short periods can cause nausea, eye irritation, increased blood pressure, headache, light-headedness, loss of appetite, poor coordination and difficulty concentrating.

The inhalation of kerosene vapors may cause sniffling, wheezing, itching, and other allergy symptoms. Researchers speculate that the fumes may irritate the nasal lining and set the stage for an inflammatory or allergic response.

MINERAL SPIRITS



Mineral sprits are a general solvent, petroleum distillate and synthetic degreaser.

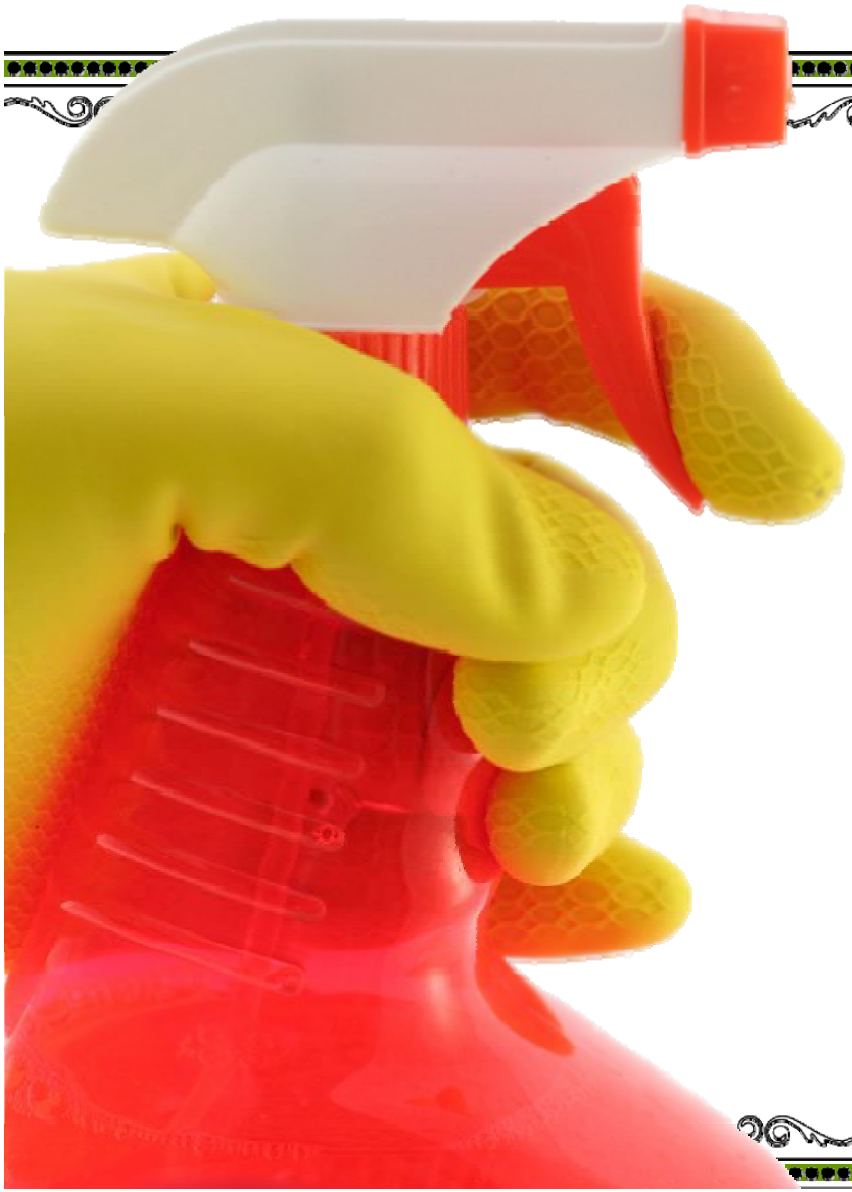
Commonly found in:

Liquid Dish Soaps
All Purpose Cleaners
Window Cleaners
Automatic Dishwashing Detergents

The Facts:

Mineral spirits are added to cleaners to help them chemically break down grease. Mineral spirits are used as a performance booster.

PETROCHEMICALS



Petrochemicals are used as a general solvent and synthetic degreaser.

Commonly found in:

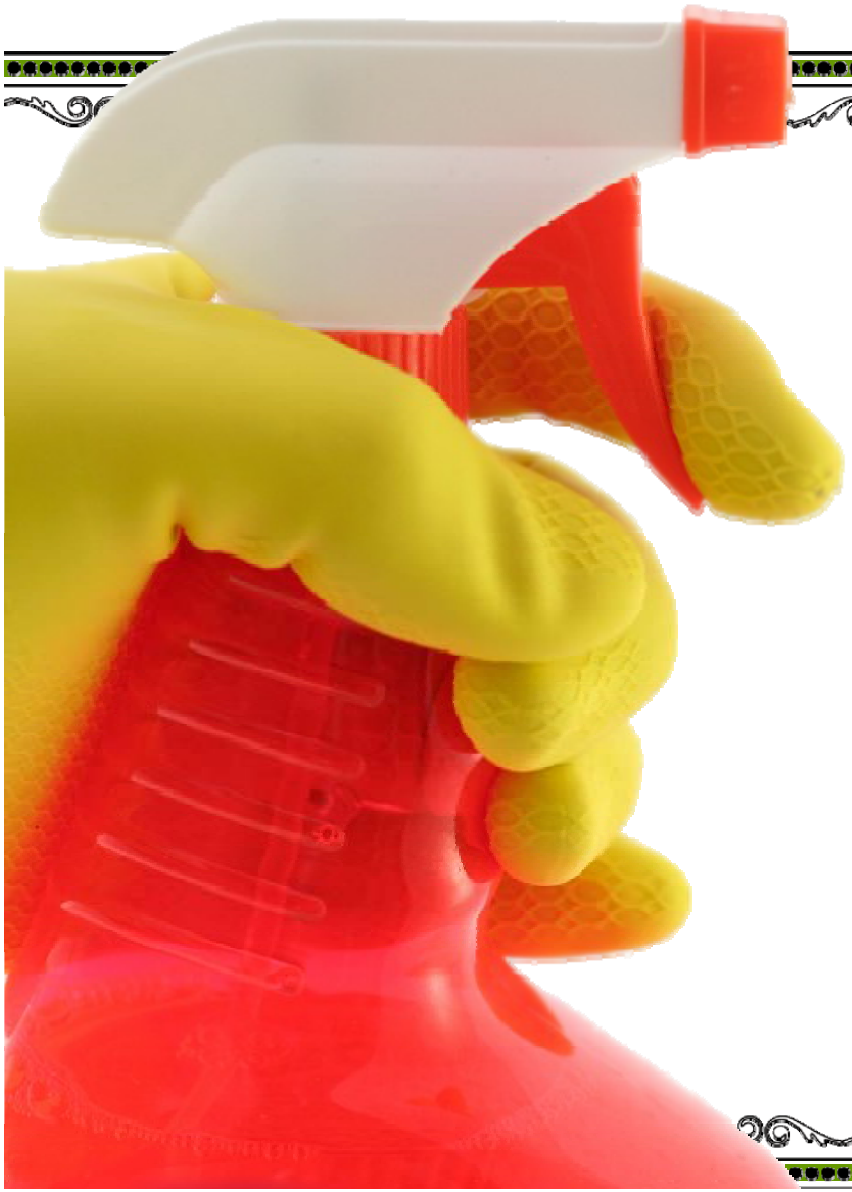
Liquid Dish Soaps
All Purpose Cleaners
Window Cleaners
Automatic Dishwashing Detergents

The Facts:

Petrochemicals contain toxic aromatic compounds. The two primary classes of petrochemicals are olefins (including ethylene and propylene) and aromatics (including benzene and xylene isomers).

Petrochemicals are known pollutants and are recognized by the Clean Air Act.

PHOSPHATES



Phosphates are mineral additives commonly used to soften hard water.

Commonly found in:

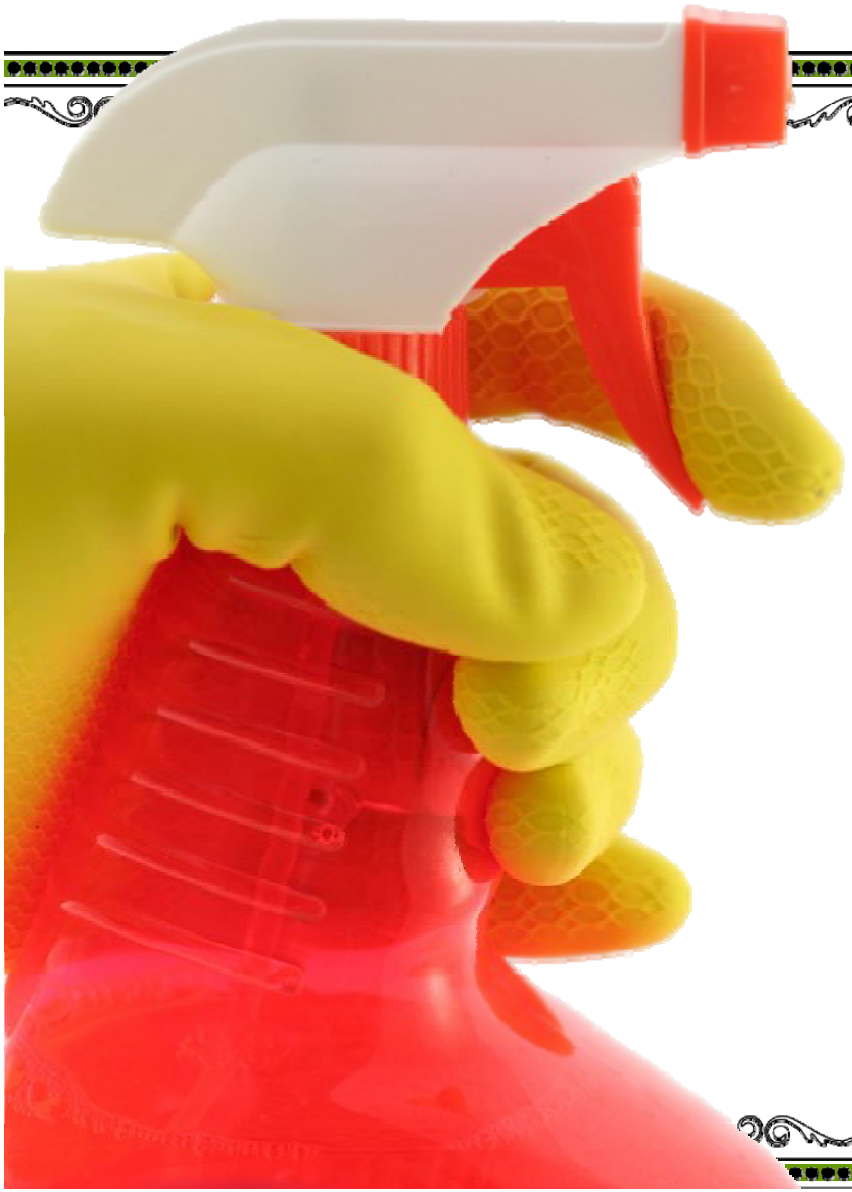
Laundry Detergents
Automatic Dishwashing Detergents

The Facts:

Levels of phosphates in fresh water bodies can be significant as a result of contamination from municipal and domestic wastewater and runoff.

High phosphate levels can destroy the health of the lake, stream or other fresh water bodies, as they allow algae in the water to grow faster than would naturally occur. Excess algae uses up oxygen needed by other aquatic life to survive.

PHOSPHORIC ACID



An extremely aggressive acid-based surfactant found in harsh industrial strength cleaners.

Commonly found in:

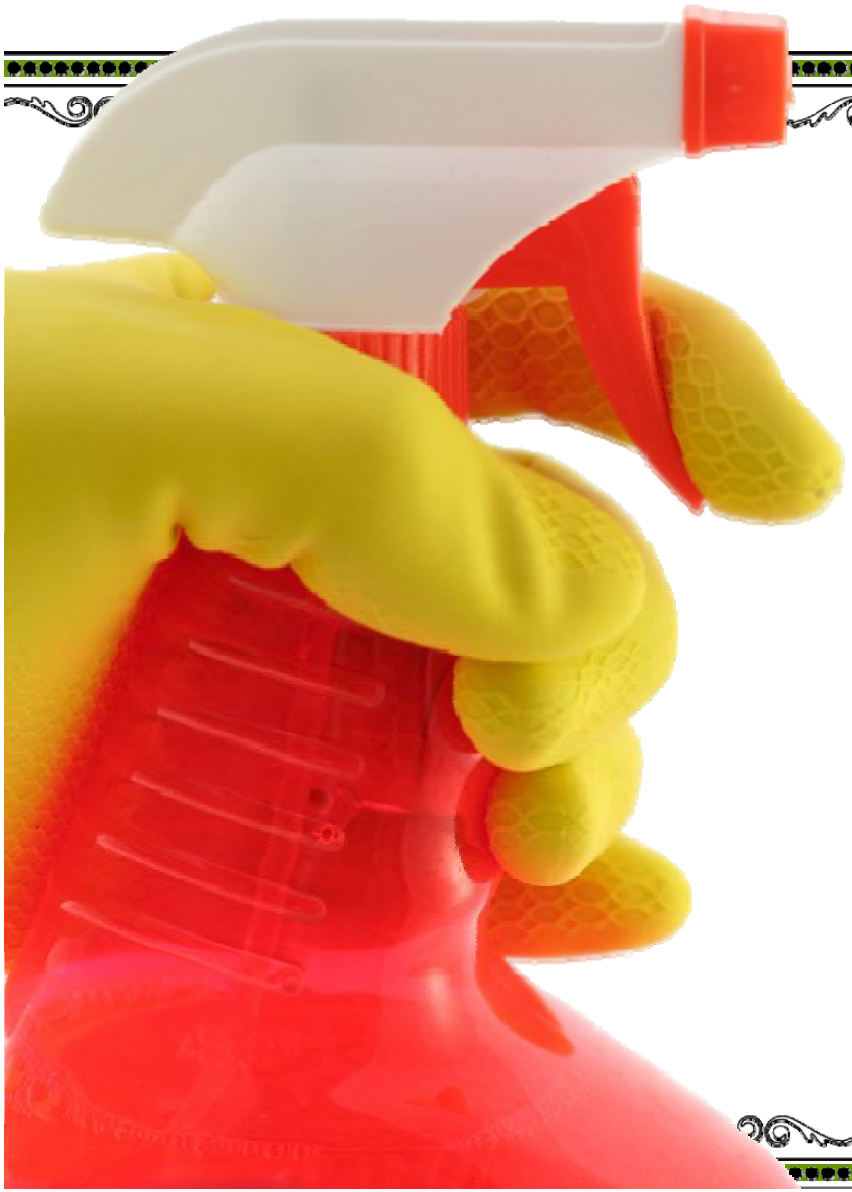
Toilet Bowl Cleaners
Drain Cleaners

The Facts:

Phosphoric acid is corrosive and very hazardous at concentrated levels. Fumes from phosphoric acid can cause eye, skin and respiratory irritation.

Phosphoric acid is also classified as an air pollutant under the Clean Air Act.

PHTHALATES



Phthalates are a colorless, odorless liquid used as a carrier to make fragrances last longer.

Commonly found in:

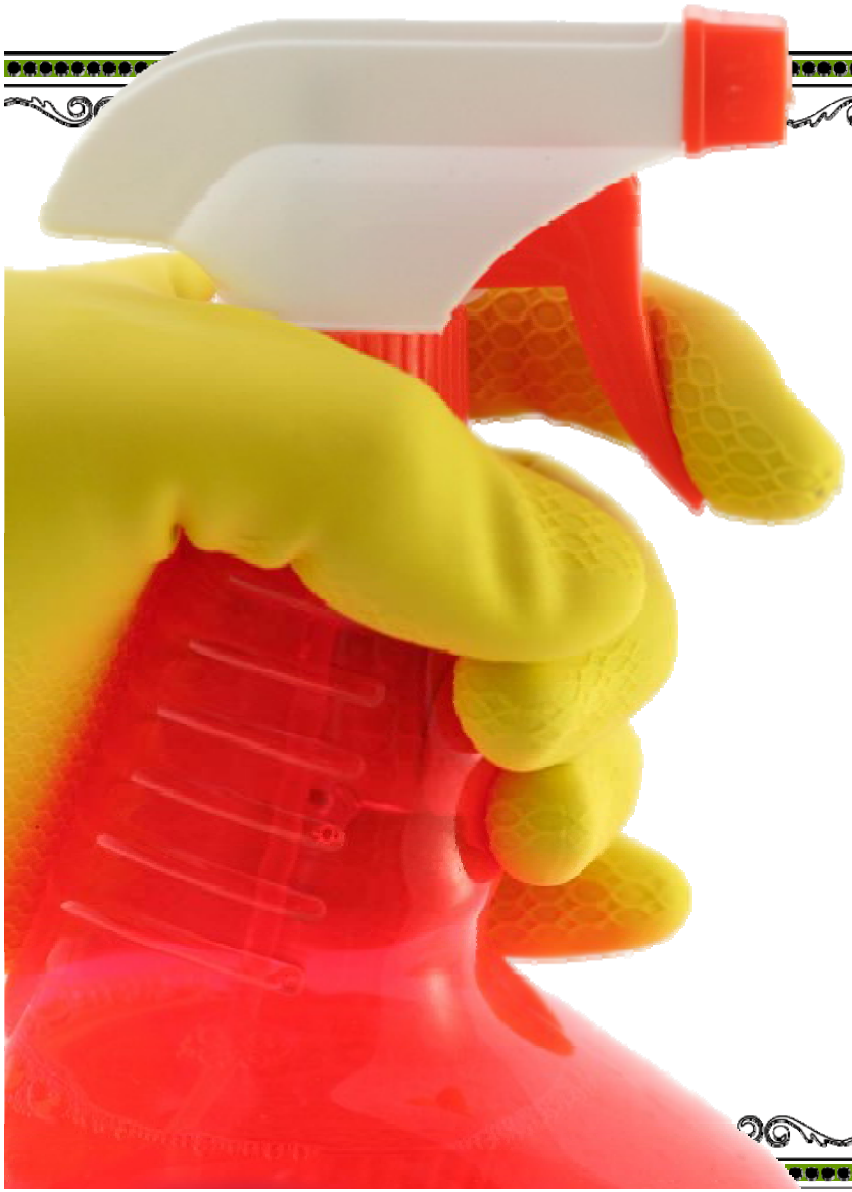
Artificially Scented Cleaners
Room Fresheners
Fabric Fresheners
Scented Odor Eliminators

The Facts:

Phthalates are being phased out of many products in the United States and European Union over health concerns.

Phthalates are known as "endocrine disruptors" because they mimic the body's hormones and have, in laboratory animal tests, been shown to cause reproductive and neurological damage. California will ban the use of phthalates in toys and baby products as of 2009.

PROPYLENE GLYCOL



Propylene glycol is a surfactant commonly used in a variety of cleaners as a building agent.

Commonly found in:

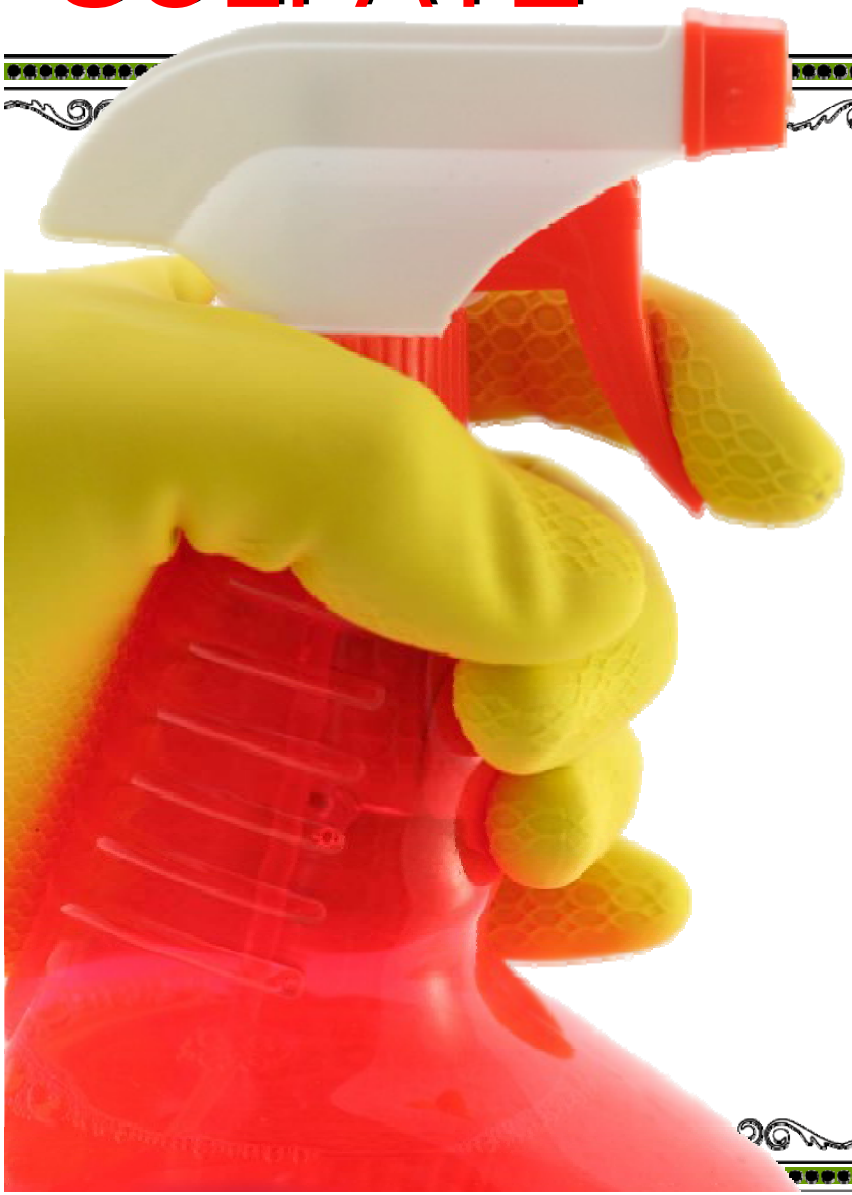
All-Purpose Cleaners
Window Cleaners
Tub & Tile Cleaners

The Facts:

This synthetic ingredient is made from nonrenewable fossil fuels.

The Federal Food, Drug and Cosmetics Act has suggested that propylene glycol not be used in applications where inhalation exposure or human eye contact with the spray mists of these materials is likely.

SODIUM LAURYL SULFATE



Sodium Lauryl Sulfate (SLS) is a surfactant commonly used in a variety of cleaners to create lather or suds.

Commonly found in:

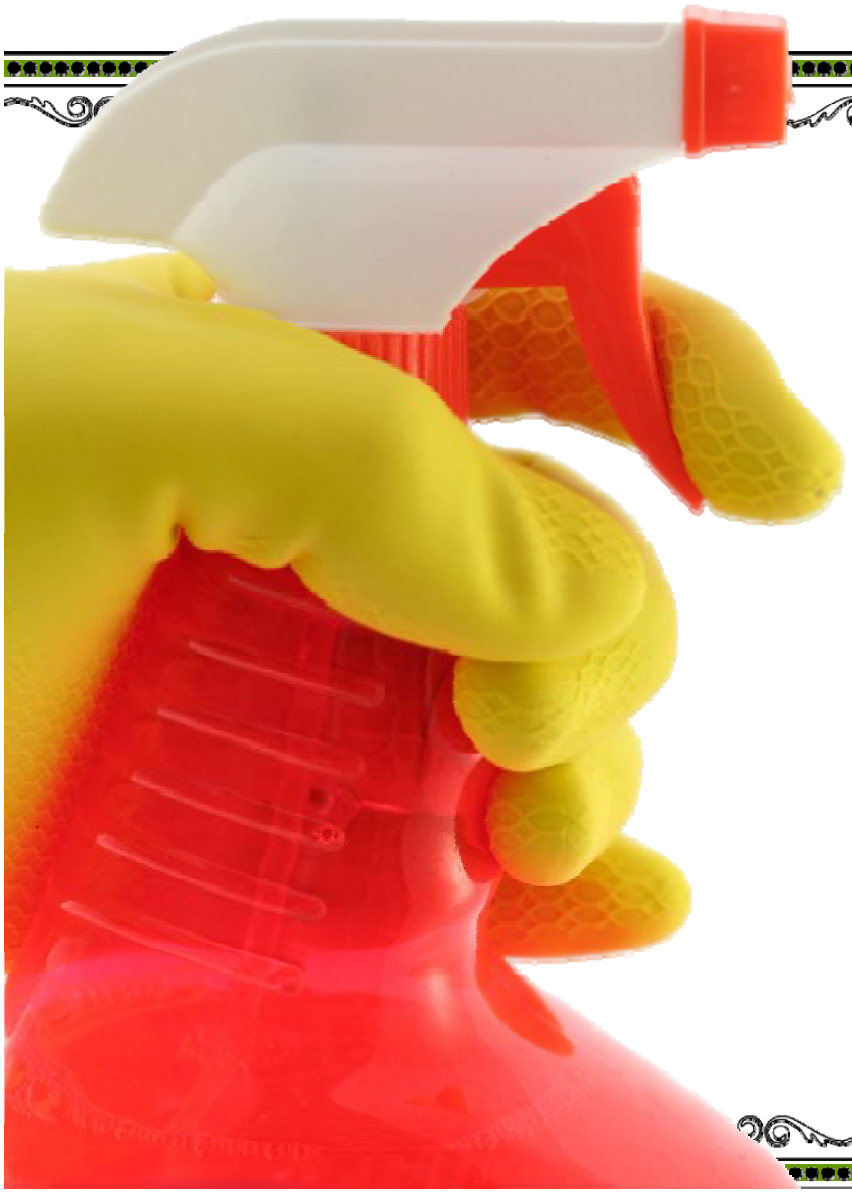
Liquid Dish Soaps
Liquid Hand Soaps
All-Purpose Cleaners
Foaming Tub & Tile Cleaners

The Facts:

This solvent that breaks down grease and can cause skin and eye irritation.

SLS can be converted by ethoxylation to sodium laureth sulfate (sodium lauryl ether sulfate; SLES), which is less harsh because it is not as much of a protein denaturant as is the unethoxylated substance SLS.

SULFURIC ACID



Sulfuric acid is an extremely corrosive surfactant in harsh industrial strength cleaners.

Commonly found in:

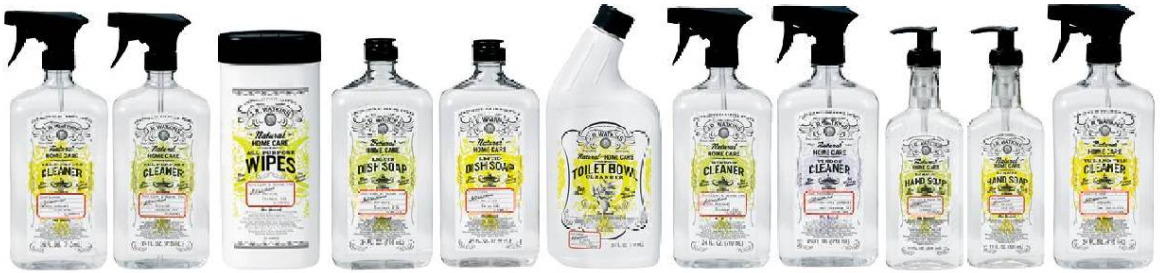
Aerosol Cleaners
Toilet Bowl Cleaners
Drain Cleaners

The Facts:

Trisodium phosphate is the most common form of sulfuric acid found in cleaners today.

Besides its obvious corrosive hazard, the main risks are skin contact leading to burns and the inhalation of aerosols.

Exposure to aerosols at high concentrations leads to immediate and severe irritation of the eyes, respiratory tract and mucous membranes.



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  - Guilt Free
- Conscience Clearing Power
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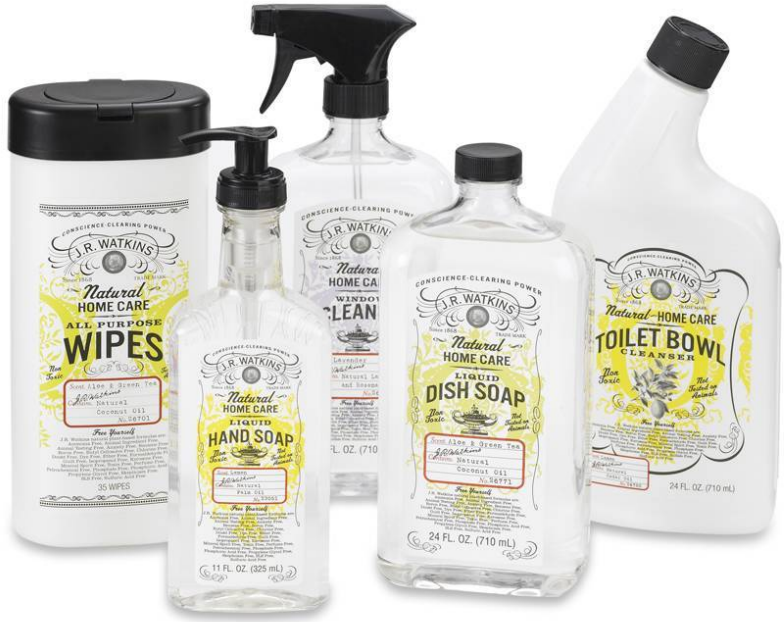
  - Reduce our environmental impact
  - Increase performance and safety
  - Create a more sustainable supply chain

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