Toxic Smart Glossary of Ingredients

2,4-D: A weed killer commonly used in "weed feed" products. Although several epidemiological studies (Hoar, 1986; Saracci 1991) suggest an increased risk of a certain types of cancer among users of 2,4-D, the chemical has not been officially declared a **carcinogen**. 2,4-D is on EPA's list of chemicals with a high probability of leaching into groundwater (US EPA, 1988) and has been found as a frequent contaminant in Puget Sound streams (Bortleson and Davis 1997)

A

acephate: Acephate is another name for the active ingredient in the insecticide Orthene. It is considered a suspect **carcinogen** by EPA (IRIS, 1997).

acetone : A moderately toxic, highly volatile and flammable solvent used in nail polish removers, glues, paint strippers and other products. Considered less toxic than aromatic hydrocarbons such as toluene and xylene, it causes symptoms similar to but slightly more severe than those of ethanol. *Skin and eye irritant. **Neurotoxic**. Used in some adhesives, art products, and paint removers and strippers.

acetoxyphenylmecury: **Neurotoxic.Teratogenic**. Used in some paints.

acid: Any material with a pH of less than 7. Acids can be corrosive if sufficiently concentrated in strength. Examples of acids used in household products include hydrochloric acid, sulfuric acid, phosphoric acid, oxalic acid, and acetic acid. The strength of the acid is more important than its identity. The pH of a product gives some clues as to the material's potential hazard, but is not in itself sufficient information

acid blue 9: **Carcinogenic**. Used in some toilet bowl cleaners and deodorizers

alcohol, denatured: Dangerous fire hazard. Irritant. Acutely poisonous

aerosol propellants: can cause heart problems, birth defects, lung cancer, headaches, nausea, dizziness, shortness of breath, eye and throat irritation, skin rashes, burns, lung inflamation, and liver damage. Aerosol gases also can turn into other more toxic gases, including fluorine, chlorine, hydrogen fluoride, hydrogen chloride and phosgene.

alcohol ethoxylate: A type of surfactant commonly used in cleaning products. Like all detergents, quite toxic to fish and other aquatic life. Biodegradability is generally good, provided molecular structure is linear and not branched, hence the name linear alcohol ethoxylate

aliphatic hydrocarbons: Prolonged exposure and inhalation may cause irritation to skin, digestive system, throat, and lungs, Neurotoxic. Used in some car waxes.

aliphatic naphtha: Eye irritant. Neurotoxic. Used in some furniture polishes

aliphatic petroleum distillate: Flammable. Eye and skin irritant. Neurotoxic. Used in some car cleaning products.

aliphatic petroleum solvent: Moderately irritating to skin on prolonged contact. Neurotoxic. Used in some carpet cleaners.

alkaline bacillus: Allergen. Used in some laundry soil and stain removers

alkanol amines: (alsomonoethanolamine,diethanolamine,triethanolamine). A class of synthetic solvents that are precursors to the carcinogen diethanolnitrosamone.

alkyl aryl sodium sulfonates: (see Alkyl benzene sulfonates [ABS])

alkyl benzene sulfonates: or ABS (also linear alkyl benzene sulfonates or LAS, linear alkyl sodium sulfonates). A class of synthetic surfactants (see surfactants below for more information). ABS are very slow to biodegrade and seldom used. LAS however, are the most common surfactants in use. During the manufacturing process, carcinogens and reproductive toxins such as benzene are released into the environment.While LAS do biodegrade, they do so slowly and are of low to moderate toxicity. LAS are synthetic. The pure compounds may cause skin irritation on prolonged contact, just like soap. Allergic reactions are rare. Because oleo-based alternatives are available, LAS should not be used. *Found in:* Laundry detergents (usually identified as "anionic surfactants").

alkyl benzyl sulfonates: (See alkyl benzene sulfonateS [ABS])

alkyl phenoxy polythoxy ethanols: (also nonyl phenoxy ethoxylate or nonyl phenol). This a general name for a group of synthetic surfactants (see Surfactants below for more information). They are slow to biodegrade in the environment and have been implicated in chronic health problems. Researchers in England have found that in trace amounts they activate estrogen receptors in cells, which in turn alters the activities of certain genes. For example, in experiments they have been found to stimulate the growth of breast cancer cells and feminize male fish. One member of this family of chemicals is used as a common spermicide, indicating the general level of high biological toxicity associated with these compounds. *Found in*: Dry detergents, all-purpose cleaners, hard surface cleaners

alkylphenol: Eye irritant May cause skin sensitization. May act on the body with weak estrogenic effects. Used in some adhesives.

allethrin: Eye and skin irritant. Can cause sudden swelling of face, eyelids, lips, mouth, and throat tissues, as well as hay fever–like symptoms. Neurotoxic. Damaging to the immune system. Highly toxic. Used in some pet flea-control products.

aluminum: Inhalation of powder has been reported as a cause of lung disease. May be implicated as one of the factors in the onset or exacerbation of Alzheimer's disease. Used in some drain openers

aluminum silicate: Suggestive evidence of carcinogenicity; its hazard is in the dry state (e.g., when sanding or scraping), Used in some paints.

ammonia: Ammonia is a gas which is intensely irritating to skin, eyes, and the respiratory tract. even in low concentrations Household ammonia is a 5-10% solution of ammonia in water, and like other types of cleaning products with ammonia, it gives off ammonia gas vapors. Environmental impacts from household use are probably minimal, although use of ammonia-based fertilizers can lead to groundwater pollution with nitrates, Ammonia reacts with chlorine bleach to produce toxic and irritating chloramines.
*Undiluted, a powerful eye and systemic irritant that may cause severe burning pain and corrosive damage, including chemical burns, cataracts, and corneal damage. Mild exposure to vapors may cause respiratory irritation. Repeated or prolonged exposure to vapors may cause irritation bronchitis, and pneumonia. Used in a wide range of household cleaning and auto products.

ammonium chloride: Corrosive to the eyes; can cause permanent damage. Used in some toilet bowl cleaners and deodorizers.

ammonium hydroxide: A solution of ammonia in water. See ammonia, above. *Eye irritant. Safe when highly diluted as in most household products. Used in some air fresheners.

amorphous fumed silica: Eye, skin, and respiratory irritant. Poses little to no risk when used. as it commonly is, in fragrance pottery.

amyl acetate: A synthetic grease cutter, amyl acetate is a neurotoxin implicated in central nervous system depression. Found in: Furniture polishes.

anionic surfactants: (See alkyl benzyl sulfonates)

aromatic hydrocarbon: Highly flammable. Heating may cause pressure buildup and possible rupture of the container. Eye and skin irritant. May contain traces of benzene, which is carcinogenic. Neurotoxic. Used in some adhesives.

artificial colours: Artificial colours are made from petroleum, though some made from coal. Many do not degrade in the environment and also have toxic effects on both fish and mammals. They do not serve any useful purpose. Additionally, they often can cause allergies and skin or eye irritation.

Aspartame: an FDA approved natural sweetener made from amino acids, can change levels of chemicals in the brain that affect behavior. Scientific testing to establish aspartame's safety prior to FDA approval resulted in brain tumors and grand mal seizures in rat studies, and depression, menstrual irregularities, constipation, headaches, tiredness, and general swelling in human test groups. When exposed to heat, aspartame breaks down into toxic methyl alcohol. This may occur even at temperatures reached by diet sodas during regular storage.

B

baking soda: has been more used for household cleaning than any other substance. It is made from soda ash, which is produced from a naturally occurring ore called trona, mined (by deep mining opposed to more damaging strip mining) in Wyoming. Baking soda is slightly alkaline, with a ph around 8.1 (7 is neutral), so it neutralizes acid-based odors in water and absorbs odors from the air.

barium: Moderate eye, skin and respiratory irritant. Used in some artist's oil colours

base: Any material with a pH greater than 7. Although a base is the opposite of an acid, toxicologically it exhibits similar effects. Strong solutions are corrosive and cause skin or eye burns.

Examples of bases are sodium hydroxide(lye), sodium carbonite, and ammonium hydroxide (ammonia).

bendiocarb: Eye and skin irritant. Allergenic. Sensitizer. Neurotoxic. Used in some home and garden pesticides.

benzene: An aromatic hydrocarbon consisting of six carbons arranged in a ring, each with a single hydrogen atom attached. The benzene ring is an important building block in organic chemistry. Benzene is a highly toxic, volatile, flammable solvent with strong narcotic properties. It causes serious damage to the blood and bone marrow, as well as leukemia. A component of gasoline, benzene is no longer used as an ingredient in other consumer products but may be present as a impurity in some refined petroleum solvents and is a component of cigarette smoke.

borax: A naturally occurring mineral composed of sodium, boron, oxygen and water. First appearing in history over 4,000 thousand years ago, Borax is used as an effective laundry whitener, general purpose cleaner and disinfectant. Somewhat less toxic than boric acid, below.

boric acid: A boron compound used as an insecticide, particularly against ants and fleas. Although it is considered moderately toxic, boric acid is not volatile and thus does not emit toxic vapors. Formerly used to clean and dress wounds, boric acid is absorbed through broken skin, and deaths have occurred from that use. The major hazard from household use is accidental ingestion or inhalation of dust.

butane: A highly flammable and potentially explosive gas often used as a propellant in aerosol spray products. Slightly toxic by inhalation, it causes central nervous system depression at high concentrations.
*Flammable. Neurotoxic at very high concentrations. Used as a propellant in a wide range of consumer aerosol products.

butoxyethanol: (see butyl cellosolve)

butyl acetate: Flammable. Skin and eye irritant. Mild allergen. Neurotoxic. Used in shoe products

butyl cellosolve: (also butoxyethanol,butyl oxitol, ethylene glycol monobutyl ether). A toxic synthetic solvent and grease cutter that can irritate mucous membranes and cause liver and kidney damage. Butyl cellosolve is also a neurotoxin that can depress the nervous system and cause a variety of associated problems. *Found in:* Spray cleaners, all-purpose cleaners, abrasive cleaners

butyl oxitol: (see butyl cellosolve)

(monobutyl ether): Mild skin and eye irritant . Damages blood and body's ability to make blood, central nervous system, kidneys, and liver. Readily absorbed through the skin. Neurotoxic. Used in some all-purpose cleaners, window cleaners, and a wide range of other household cleaning products.

C

cadmium: Inhalation affects respiratory system and kidneys. Carcinogenic. Teratogenic. Used in some artist's oil colours.

calcium carbonate: Moderate to severe eye irritant. Used in some all-purpose cleaners

calcium hypochlorite: Can cause severe irritation of skin and mucous membranes. Used as a disinfectant for pool chlorine.

calcium oxide: Characterized as a powerful caustic to living tissue. Used in some home and garden pesticides.

carbaryl (Sevin): A highly toxic insecticide in the carbamate family of neurotoxins. Also extremely toxic to bees, which can be killed by visiting previously treated foliage. To aquatic organisms, and to birds. Found in a number of garden insecticides, as well as some slug baits.
* Eye and skin irritant. Allergenic. Sensitizer. Highly neurotoxic; symptoms include increased salivation, coughing, difficult breathing, and phlegm. Associated with birth defects. Used in a wide range of pet flea-control products.

carcinogen: an agent that increases the risk of cancer

caustic soda: (see sodium hydroxide)

chlorine: (also known as hypochlorite, sodium, dichloroisocyanurate, hydrogen chloride, hydrochloric acid) Chlorine was first manufactured on an industrial scale in the early 1900's. It was used as a powerful poison in World War1.Chlorine is the household chemical most frequently involved in household poisonings in the U.S. Chlorine also ranks first in causing industrial injuries and deaths resulting from large industrial accidents. Chlorine is an acutely toxic chemical created through the energy intensive electrolysis of sea and water. This manufacturing process also creates extremely

toxic byproducts. Sodium hypochlorite (known as household bleach, a 5% solution if sodium hypochlorite) is a chemical precursor of chlorine and should be treated as such because any use will create pure chlorine in the environment. *Found in:* Scouring powders, laundry bleach, dishwasher detergent, and basin, tub and tile cleaners.

chlorophene: (see O-benzyl-p-chlorophenol)

chlorpyrifos (Dursban): A highly toxic and moderately persistent organophosphate insecticide used to control structural pests such carpenter ants and termites, as well as fleas and other house and garden insects. It is extremely toxic to fish, birds and bees. Indoor uses may be especially hazardous to children (Gurunathan 1997)
*Severe eye, skin, and respiratory irritant. Allergenic. Sensitizer. Highly neurotoxic. Significant reproductive effects. Commonly used by home exterminators, for lawn care, and in pesticide products in stores. Poses acute and chronic hazards to both pets and owners.

citrus oil: A fragrant oil with strong solvent properties, distilled from the skins of citrus fruit such as oranges or lemons. Used alone as a solvent or degreaser, or formulated into cleaning products to add efficacy and odor. Citrus oil contains a number of compounds, including limonene and linalool, which are useful as insecticides. Citrus oil is frequently used in flea sprays and shampoos.

coal tar: A complex mixture of hydrocarbons obtained as a by-product of the manufacture of coke in the steel industry. Used in many types of personal care products, especially dandruff shampoo. Some coal tars have been shown to cause skin cancers when applied to laboratory animals (NTP,1991).

cobalt: Carcinogen. Used some artist's oil paints

cocamide DEA: (also cocamide diethanolamine,fatty acid diethanolamides). Even though this surfactant, which is a foam stabilizer, is made from coconut oils, it is unacceptable because it contains diethanolamine. This synthetic component can react with sodium nitrate or nitrate oxides to form carcinogenic compounds called nitrosamines. *Found in:* Dishwashing liquids, shampoos, cosmetics.

cocamide diethanolamine: (see cocamide DEA

cocodiethanolamide: Mild eye and skin irritant. Used in some interior and exterior cleaners and protectants.

concentrated perfume oil: Mild eye irritant. Used in some air freshners

copper naphthenate: One of the copper compounds used as a wood preservative. Because of its relatively low acute toxicity to humans, it is considered a safer alternative to pentachlorophenol and creosote. Copper compounds, including copper naphenate, are highly toxic to aquatic organisms. Copper accumulates in soils, and concentrates in marine and fresh water organisms.

crystalline silica: Eye, skin, and lung irritant. Carcinogenic. Its hazard occurs when it is in the dry, not liquid state. Used in some highly popular brands of cleanser, cat litter, paints, and some powered flea-control products for pets

cyanoacrylate: The major ingredient in instant glues. Vapors are intensely irritating to the eyes. The main hazard from these glues is that they rapidly and tightly bond to skin.

cyanoacrylate ester: Combustible. Vapors can irritate the eyes and skin, as well as the mucous membranes. Used in some adhesives.

cyclohexane: Flammable. Moderate eye , skin, respiratory irritant. Use in some adhesives.

cyfluthrin: Eye and skin irritant. Can cause sudden swelling of face, eyelids, lips, mouth, and throat tissues, as well hay-fever like symptons. Neurotoxic. Used in some pet flea- control products.

D

d-cis trans allethrin: eye and skin irritant. Can cause sudden swelling of face, eyelids, lips, mouth , and throat tissies, as well as hay fever-like symptoms. Neurotoxic. Use in some pet flea-control products.

deet: Eye and skin irritant. Sensitizer Neurotoxic. Readily absorbed into skin. Used in mosquito and insect repellents, as well as pet flea-control products.

detergents and soap(uncharacterized): Can cause temporary respiratory tract irritation when in powder form (as in the case of laundry detergents) and mild to severe irritation of eyes in both powder and liquid form (as with dish washing liquids, or other, harsher liquid cleaning products). Symptoms of respiratory distress include coughing, sore throat, wheezing, and temporary shortness of breath. Eye-related symptoms include stinging, tearing, itching, swelling, or redness. Used in some carpet cleaners, dishwashing products, laundry detergents, and a wide range of other household cleaning products

d-limonene: The major terpene component of citrus oil. Studies have shown it to promote cancer in some cases and prevent cancer in others. It clearly causes cancer in male rats (NTP,1990),but many feel by a mechanism not possible in humans.
*Eye and skin irritant. Sensitizer. Suggestive evidence of carcinogenicity. Neurotoxic Teratogenic. Used in some paints and pet flea-control products and passed off as safe. Its safety is suspect.

Diazinon: An insecticide commonly used in lawn and garden insecticide products. Its extreme toxicity to birds as manifested in numerous actual bird kills has resulted in EPA banning its use on golf courses and sod farms.Diazinon may be contaminated with sulfotepp, a much more toxic and persistent chemical than diazinon itself (Meier, 1979).Diazinon is a frequent contaminant of groundwater and surface water (US EPA 1989; Bortleson and Davis 1997).
*Combustible. Corrosive to eyes. Severe eye and skin irritant. Allergenic. Sensitizer. Highly neurotoxic. Toxic to the fetus. Toxic to birds. Used in lawn pesticides and flea collars, as well as by home exterminators and lawn care companies.

1,4-dichlorobenzene(para-dichlorobenzene): Carcinogen. Highly volatile. Causes liver and kidney damage. Used in moth repellents and toilet deodorizers.

dichlorodifluoromethane: Eye irritant. Neurotoxic. Used in some drain openers.

dichlorvos (DDVP): Eye and skin irritant Allergenic. Sensitizer, Carcinogenic. Highly neurotoxic. Teratogenic: causes sperm and other reproductive abnormalities. Used in some no-pest strips, flea collars, and other pet flea-control products.

diethanolamine (DEA): Mild skin and severe eye irritant. Reacts with nitrates (added as undisclosed preservatives to some products or their raw materials or present as contaminants) to form highly potent carcinogenic nitrosamines. Nitrosamines have been shown to readily penetrate the skin .Used in a wide range of household cleaning products.

dimethhylbenzyl ammonium chloride: Severe eye and skin irritants. Used in some bathroom cleaners and toilet bowl cleaners and deodorizers

dimethhyl ethylbenzyl ammonium chloride: Severe eye and skin irritants. Used in some bathroom cleaners.

dioctyl phthalate (di [2-ethylhexyl] phthalate): Skin and severe eye irritant. Carcinogenic. Reproductive toxin. Used in adhesives and correction fluid.

dioxane: (also diethylene dioxide, diethylene ether, diethylene oxide) (not to be confused with dioxin). Dioxine is a solvent classified by the EPA as a probable human carcinogen, and some research suggests that it may suppress the immune system. Dioxine is listed in the 1990 Clean Air Act as a hazardous air pollutant and is on the EPA's Community Right-to-Know list. Found in: Windows cleaners.

dipropylene glycol methyl ether: Eye and skin irritant. Used in some laundry soil and stain removers, car interior and exterior cleaners and protectants,and shoe products

d-trans allethrin: Eye and skin irritant. Can cause sudden swelling of face ,eyelids, lips, mouth, and throat tissues, as well as hay fever-like symptom. Neurotoxic. Used in some pet flea-control products.

E

EDTA: (ethylene-diamino-tetra-acetate). A class of synthetic, phosphate-alternative compounds used to reduce calcium and magnesium hardness in water. EDTA is also used to prevent bleaching agents from becoming active before they're immersed in water and as a foaming stabilizer. EDTA does not readily biodegrade and once introduced into the general environment can redissolve toxic heavy metals trapped in underwater sediments, allowing them to re-enter and recirculate in the food chain. *Found in :* Laundry detergents.

ethoxylated alcohols: May be contaminated with 1,4-dioxane, which is carcinogenic and rapidly penetrates the skin.

ethoxylated nonyl phenol: Eye and skin irritant.Used in some car bug , insect, and tar removers.

ethyl alcohol: Mild eye, skin, respiratory tract irritant. Used in air fresheners, pet flea-control products, and a wide range of other household cleaning products.
ethyl benzene Neurotoxic. Used in some art products.

ethanol: Derived from fermentation of sugar and present in alcoholic beverages. Well known adverse effects on human reproduction have lead to the familiar warnings on wine and beer bottles. Central nervous system depressant. Acute toxicity considered slight. Denatured ethyl alcohol is more toxic. Highly flammable. A common ingredient in mouthwashes, cold medicines, and other over the counter preparations.

ethyl cellosolve: This synthetic solvent is both a nasal irritant and a neurotoxin (see solvents). Found in All-purpose cleaners, automotive antifreeze.

ethylene glycol: A moderately toxic liquid which is a principal component of automobile antifreeze.
*Flammable. Eye, skin, respiratory irritant. Excessive exposure may cause kidney, blood, and possibly liver damage. Neurotoxic. Reproductive toxin. Absorbed through the skin. Used in antifreeze, metal polishes, stains, car waxes, and shoe products

ethylene glycol monobutylether: (see butyl cellosolve)

ethylene glycol propyl ether: Eye and skin irritant. Neurotoxic. Used in some paints.

F

fatty acid alkanol amides/amines: These surfactants are made by reacting an ethanolamine with a fatty acid obtained from either synthetic petroleum sources or natural vegetable oils.(Most fatty acids are produced synthetically as this method is currently less expensive.) Fatty acid alkanolamides can react with materials in the environment to form nitrosamines (see diethanolamines above). Found in: Shampoos and conditioners, liquid cleansers, and polishes.

fatty acid diethanolamines: (see cocamide DEA)

feldspar: Mild respiratory irritant. Used in some all-purpose cleaners.

fenvalerate: Highly neurotoxic to humans and pets. Can cause tingling and burning sensation of the hands and face. Sweden has discontinued its use among forestry workers. Used in some home and garden pesticides, as well as pet flea-control products

fluoride: is carcinogenic. More than ten thousand cancer deaths per year are linked to fluoridated water. Exposure also can cause tiredness and weakness, mottling of the teeth, wrinkled skin, a prickly sensation in the muscles, kidney and bladder disorders, constipation, vomitting, itching after bathing, excessive thirst, headaches, arthritis, gum diseases, nervousness, diarrhea, hair loss, skin dissorders, stomach disorders, numbness, brittle nails, sinus problems, mouth ulcers, vision problems, eczema, bronchitis and asthma. Excessive fluoride can also reduce blood vitamin C levels, weaken the immune

system, and cause birth defects and genetic damage. The use of fluoride has been banned in ten European countries.

formaldehyde: Formaldehyde earned notoriety through its widespread use as a component of urea formaldehyde insulation. It is an unstable compound usually used in aqueous solution, but which emits the highly irritating gaseous form of the compound. Used as a preservative in many types of products. Urea-formaldehyde glues emit formaldehyde vapors which can be a serious indoor air pollution problem (US EPA, 1988b). Formaldehyde exposure causes sensitization in a significant fraction of people exposed. Formaldehyde caused cancer in animal tests.
*Poisonous irritant to the skin, eyes, and mucous membranes. A sensitizer. Carcinogenic. Neurotoxic. Used in some furniture polishes, car cleaners and waxes, and a wide range of other consumer items, especially paints and related products.

G

germicides: A broad category of usually synthetic bacteriacides. While some germicidal ingredients are natural (tea tree oil, borax), it is still safer assume that any germicide ingredient has a synthetic source until proven otherwise. For more information, see benzalkonium chloride above. *Found in* Spray disinfectants, disinfecting cleaners, disinfecting hand soaps and lotions

glycol ether (including butoxy ethanol, butyl cellosolve, butyl diglycol, butyl carbinol): A class of chemicals related to the glycols, but which include many variants used as water soluble solvents in a variety of cleaning products, latex paint, and other applications. The toxicity varies with chemical structure, but typically the ethylene glycol ethers are more toxic than propylene glycol ethers. Some glycol ethers cause damage to the blood and bone marrow (HESIS, 1987). Many cause reproductive effects, such as birth defects. All are readily absorbed through the skin.
*Eye irritant. Used in some household cleaning products.

glyphosate: A herbicide of relatively low acute toxicity used as the active ingredient in the popular Roundup and Kleenup weed killers. The major toxic effects in those products appear to arise from the surfactant which is used as the inert ingredient. This surfactant is highly toxic to fish (O'Brien, 1990). Formaldehyde is a breakdown product (Rueppel,1977).

H

heptane: A highly volatile, flammable solvent used as a principal ingredient in rubber cement. Although somewhat less toxic than hexane (see below), heptane shares hexane's ability to cause nerve damage (James, 1985).
*Flammable. Neurotoxic. Used in some shoe products.

hexachlorobenzene(HCB): Eye and skin irritant. Sensitizer. Carcinogenic. Neurotoxic. Used in some artist's oil colours

hexane: Similar to heptane, but more toxic. Used in rubber cement and rubber cement thinners. Causes permanent nerve damage in sufficient doses (James, 1985).Hexane accumulates in body tissue. *Flammable. Eye, skin, and respiratory tract irritant. Neurotoxin. Used in some adhesives and art products

hydrochloric acid: (also see chlorine and muriatic acid) A strong mineral or "inorganic" acid. In high concentrations, it is extremely corrosive. *Found in:* Toilet bowl cleaners

hydrogen peroxide: An oxidizing agent used as an alternative to chlorine bleach. Quite toxic in high concentrations, but household products usually contain about 5%. Highly unstable; breaks down quickly into water and oxygen in the environment

hydramethylnon: Carcinogenic. Used in some home and garden pesticides

hydrocarbon solvent: Slight to moderate skin irritant. Neurotoxic. Used in furniture polishes and a wide range of other consumer products

hydrochloric acid: Corrosive. Severe eye, skin, and mucous membrane irritant; highly toxic if inhaled with unknown systemic effects. Inhalation of vapors may cause severe irritation of the respiratory system, coughing, and difficulty breathing. Used in some toilet bowl cleaners and deodorizers.

hypochlorite: (see chlorine)

hydrogen chloride: (see chlorine)

hydrogenated oil: hydrogenation of oil into hard fat (margarine, vegetable shortening) destroy or deforms the essential fatty acids in the oil. Lack of essential fatty acids can contribute to neurological disease, heart disease, arteriosclerosis, skin disease, cataracts, arthritis, high blood-cholesterol levels, and cancer.

I

inert ingredients: Any ingredients in a pesticide formulation whose function is something other than killing the target pest. Include solvents, carriers, detergents, and propellants. Inert ingredients are not necessarily chemically or toxicologically inert. In fact, some are more toxic than the active ingredients in a pesticide formulation. Inert ingredients are usually considered trade secret. Commonly used inert ingredients include kerosene, xylene, toluene, benzene, methylene, chloride, and petroleum distillates.

iodine: Can cause stinging and burning of the eyes and conjunctivitis. Skin irritant. Used in some toilet bowl cleaners and deodorizers.

isobutene: A form of butane with a particular molecular structure, but similar in toxicology to either butane or propane, Used as a propellant in aerosol sprays. Highly flammable.
*Flammable. Neurotoxic at very high concentrations . Used as a propellant in aerosols.

isopropanol: An alcohol frequently used as a solvent in consumer cleaning products, rubbing alcohol, felt- tipped pens, inks, etc. More toxic than ethanol, but much less so than other types of solvents. Highly flammable.

isobutyl acetate: Flammable. Skin and eye irritant. Used in some adhesives.

isoparaffinic hydrocarbon: Moderate eye and skin irritant. Used in a wide range of household cleaning products, including air fresheners and car waxes.

isopropyl alcohol: Combustible. Can be a moderate eye irritant. Neurotoxic at high concentrations. Used in some carpet cleaners and car waxes

kerosene: Flammable. Slight to moderate eye and skin irritant. May contain traces of benzene, which is carcinogenic. Neurotoxic. Used in some furniture polishes and car waxes.

L

lead: A highly toxic metal once used in oil-based paints and printing inks, and still used in some motor fuels, some pigments, solders, and gradual hair dyes. Older homes may still contain layers of lead-bearing paint which pose a toxic hazard if disturbed. The soil outside older homes also typically contains elevated lead levels, which correlate with lead levels in house dust inside the home(Roberts,1991). Lead passes through the blood and accumulates in the bone. It causes loss of learning ability in children at levels as low as 10 ppm in the blood.(ATSDR,1988). Many lead compounds cause cancer. Like other metals, not biodegraded in the environment.
*Carcinogenic. Neurotoxic. Reproductive effects. Used in some artist's oil paints

light petroleum distillates: Eye, skin and respiratory irritant. Can cause rashes of the skin. Neurotoxic. Repeated exposure has caused kidney disorders and damage in experimental animals. Used in some spot removers.

limonene fraction terpenes: Eye .skin and respiratory irritant. Used in some spot removers.

linear alkyl benzene sulfonate: One of the most widely-used surfactants in the detergent industry. It was the first modern "biodegradable" detergent, invented after early detergents were found to be contaminating rivers across the country. It is considered by most measures to be reasonably quick to break down in aerobic conditions (Swisher, 1987), but is highly toxic to fish before breakdown.

linear alkyl benzene sulfonates: (see alkyl benzene sulfonates)

linear alkyl sulfonates: (see alkyl benzene sulfonates)

M

malathion: A commonly used insecticide, Considered highly toxic, likely to leach into groundwater, and harmful to aquatic life in very low concentrations. One of its possible breakdown products is far more toxic than malathion itself (HSDB,1992; RTECS,1992).

medium aliphatic hydrocarbons: Suggestive evidence of carcinogenicity. Used in some car waxes.

medium aliphatic solvent naphtha: Eye and skin irritant. Neurotoxic. Used in some auto products.

mercury: The only liquid metal, mercury has many applications in the electrical industry. In the home it was once common in thermometers and still is used in thermostats. Because of its toxicity, mercury has been removed from many products, including latex paints, in which it was once used as a mildicide, and alkaline batteries, Mercury is still likely to be found in old, spent batteries or those made in Asia.

metaldehyde: A common active ingredient in slug and snail bait. Moderately toxic and not very persistent, it poses a major hazard to pets, who are attracted to it and may think it is food

methanol (methol alcohol): The simplest alcohol , sometimes called wood alcohol. Toxic effects similar to ethanol, except for its unique ability to cause blindness as a side effect, a property which makes its presence in many paint removers a major hazard. Like other alcohols, methanol is highly flammable
*Severe eye and skin irritant. Can cause permanent blindness. Neurotoxic. Used in some paint removers and strippers and art products.

methoxychlor: Eye and skin irritant. Sensitizer. Limited evidence of carcinogenicity. Reproductive toxin. Weak estrogen-like effects. Used in some pet flea-control products.

methyl ethyl ketone: Eye, skin and respiratory irritant. Neurotoxic. Reproductive toxin. Use in some thinners and adhesives.

methylene chloride (dichloromethane): A chlorinated hydrocarbon solvent commonly use in paint removers and many types of aerosol sprays, including paints, adhesives, lubricants, and pesticides. Causes cancer in animals. In the human body, it is metabolized to carbon monoxide, reducing the blood's ability to carry oxygen. It has caused spontaneous heart attacks in persons with cardiovascular conditions. Currently CPSC requires special hazard labeling on consumer products containing methylene chloride, and it is likely that the material may soon be banned from consumer products. EPA considers methylene chloride a priority water pollutant
*Severe skin and moderate eye irritant. Can cause irregular heartbeat, even heart attack, when inhaled. Carcinogenic. Neurotoxic. Used in some thinners and spray paints.

mineral acids: (see hydrochloric acid)

mineral seal oil: Eye and skin irritant. Can cause dermatitis. Used in some furniture polishes.

mineral spirits: Severe eye and skin irritant. Neurotoxic. Used in some floor cleaners, waxes, polishes, and many paints and related products.

monethanolamine: Moderate skin, and severe eye irritant. Used some paint removers and strippers.

morpholine: Moderate to severe eye, skin, and mucous membrane irritant. Reacts with nitrates(added as undisclosed preservatives to some products or their raw materials or present as contaminants) to form carcinogenic nitrosamines. Can cause kidney damage. Used in some furniture polishes and car waxes

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N

naled: Eye and skin irritant. Neurotoxic. Transforming product includes dichlorvos, which is carcinogenic and a reproductive toxin. Used in some pet flea-control products.

naphtha: Another name for petroleum distillates (see below)

naphthalene: Essentially two benzene rings linked together, naphthalene is a solid material derived from coal tar. It is one of two chemicals commonly used to make mothballs. It is highly toxic and in some individuals, particularly those of dark skinned races, can produce a catastrophic breakdown of red blood cells, resulting in anemia or acute kidney failure. Listed as a priority water pollutant by EPA, it bioconcentrates in aquatic organisms.
*Combustible. Eye and skin irritant. Can cause corneal damage and cataracts. Neurotoxic. Reproductive toxin: transported across the placenta and can cause blood damage. Used in some moth repellants and car waxes.

neurotoxin: an agent causing an adverse in the structure or function of the nervous system; the effect may produce either structural change in the nervous system, such as gross cell loss, or function changes that may be related to subtle changes in nerve cell communication.

n-octyl bicycloheptene dicarboximide: Eye and respiratory tractirritant. Used in some household and garden pesticides,as well as pet flea-control products.

nonionic surfactant: Eye irritant. Used in some toilet bowl cleaners and deodorizers

nonoxynol 4: Eye and skin irritant. Used in some laundry soil and stain removers.

nonylphenol ethoxylate: A type of surfactant used in some cleaning products. It has a poor reputation for biodegradability (Swisher, 1987), however, and many manufacturers have abandoned it in favor of other surfactants. The intermediate breakdown product nonylphenol is more toxic to fish than the original substance (Naylor, 1992).
*Mild eye irritant. Used in some air freshners.

nonylphenol polyethylene oxide: Eye, skin, and respiratory tract irritant. Use in some spot removers.

nonylphenol resin: Skin and eye irritant. May cause skin sensitization. Used in some adhesives.

O

oil of orange: Skin irritant. Carcinogenic. Used in some all-purpose cleaners, furniture polishes, and spot removers

oleic diethanol amide: Eye and skin irritant. Used in some car waxes

ortho phenylphenal: Severe eye and skin irritant. IARC says the evidence is inadequate to assess its carcinogenicity. EPA says it is probably carcinogenic to humans. (As is our general policy, we have used the higher ranking). Used in some air fresheners and disinfectants

oxalic acid dihydrate: Moderate eye and skin irritant. Can be allergenic. Used in some cleansers.

P

parabens (methyl, propyl): Allergenic. Used as preservatives in some household products

permethrin: Eye and skin irritant. Can cause sudden swelling of face, eyelids, lips, mouth, and throat tissues, as well as hay fever-like symptoms. Carcinogenic. Neurotoxic. Used in some household and garden pesticides, and pet flea-control products.

paradichlorobenzene (1,4-dichlorobenzene, p-dichlorobenzene, PDCP): One of two chemicals used to make mothballs and toilet bowl deodorizer tablets. Less acutely toxic than naphthalene, but PDCB causes cancer in laboratory animals (NTP,1991). Like many other chlorinated hydrocarbons, it is considered a priority water pollutant by EPA. It bioconcentrates in fatty tissues and may bioaccumulate

pentachlorophenol (penta): A chlorinated ring hydrocarbon used widely as a wood preservative. Now banned from use as a consumer product, it is a suspect human carcinogen based on its ability to cause cancer in test animals (RTECS, 1992). It bioconcentrates in body tissue.

petroleum distillates (petroleum naphtha): A generic term describing mixtures of hydrocarbons derived by distilling crude oil. As an ingredient in household products it generally includes liquids with a varying range of volatility. Highly volatile mixtures are found in cleaning fluids, and less volatile mixtures are found in lighter fluids, furniture polishes and lubricating oils. Inhalation hazards vary with volatility, but all petroleum distillates share the ability to cause potentially fatal chemical pneumonia if aspirated into the lungs as a result of accidental ingestion (Gosselin, 1984).Flammable
*Fire hazard. Eye, skin, and respiratory irritant. Can cause conjunctivitis and dermatitis. May contain traces of benzene, which is carcinogenic. Mild to significant neurotoxic effects leading to organic brain damage, depending on concentration and duration of exposure. Used in a wide range of products, including heavy-duty cleaners, laundry stain removers, home and garden pesticides, pet flea-control products, and car waxes.

petroleum hydrocarbons: Eye, skin, and respiratory irritant. May contain traces of benzene, which is carcinogenic. Neurotoxic. Used in some furniture polishes.

petroleum process oil: Eye, skin and respiratory tract irritant. May contain traces of benzene, which is carcinogenic. Neurotoxic. Used in some furniture polishes.

petroleum solvents: Severe eye, skin and respiratory irritant. May contain traces of benzene, which is carcinogenic. Significant neurotoxic effects. Used in some floor cleaners, waxes, and polishes

petroleum spirits: Eye, skin, and respiratory irritant. May contain traces of benzene, which is carcinogenic. Neurotoxic. Used in some spot removers.

phenol: A highly toxic, corrosive chemical which is quite hazardous by all routes of exposure (James 1985). Formerly called carbolic acid, it is a potent disinfectant, which has been used for

centuries but is increasingly being abandoned in favor of safer chemicals. It is frequently found in medications such as sore throat lozenges and gargles. Considered a priority water pollutant by EPA

phenothrin (sumithrin): Eye and skin irritant. Can cause sudden swelling of face, eyelids, lips, mouth and throat tissues, as well as hay fever-like symptoms. Neurotoxic. Used in some pet flea-control products.

phosphates: A group of compounds containing phosphorous and oxygen, which are used to enhance the effectiveness of detergents. Also a component of fertilizers, phosphates are essential plant nutrients. Phosphates residues from detergents cause excessive growth of algae and freshwater lakes and streams. As a result, many states and regions have banned phosphates from laundry detergents. They are still commonly used in dishwasher detergents because they are more difficult to replace in that application.

phosphoric acid: Corrosive. Severe eye, skin, respiratory irritant. Breathing vapors can make lungs ache. Used in some bathroom cleaning products, especially those that remove lime and mildew, metal polishes

pine oil: An oil extracted from pine trees as part of the manufacturing of paper. Used as a solvent and disinfectant in household cleaners, particularly pine cleaners, which contain as much as 40% pine oil. Not highly toxic, but many people have allergic reactions to pine oil
*Weak allergen. Very large doses cause central nervous system depression. Used in a wide range of household cleaning products.

piperonyl butoxide: A chemical synergist usually combined with pyrethrins to increase their effective toxicity. Believed to interfere with the body's ability to detoxify pyrethrins. Toxicity not well studied.

Plastics: out-gassing (eg: new car smell)

- Acrylonitrile (lucite/plexiglass): suspected carcinogen. Also can cause breathing difficulties, vomitting, diarrhea, nausea, weakness, headache, and fatigue.

- Epoxy resins: suspected human carcinogens.

- Latex: one of the less toxic plastics. Though usually it is considered relatively safe, clinical observation by medical doctors has shown that latex can cause adverse reactions in those who are sensitive to petro-chemical derivitives.

- Nylon: usually considered relatively safe, but clinical observation by medical doctors has show that nylon can cause adverse reactions in those who are sensitive to petrochemicals. Both benzene and phenol are used to make nylon.

- Phenol-formaldehyde resin ("Bakelie"): releases minute amounts of formaldehyde when new.

- Polyester: can cause eye and respitory-tract irritation and accute dermititis.

- Polyethylene: suspected human carcinogen.

- Polyurethane: can cause bronchitis, coughing, and skin and eye problems; also releases toluene diisocyanate, which can produce severe pulmonary effects and sensitization.

- Polyvinyl chloride (PVC): releases vinyl chloride, especially when the product is new. Vinyl chloride is carcinogenic, mutagenic, and teratogenic, and can cause mucous-membrane dryness, numbness in the fingers, stomach pains, hepititis, indigestion, chronic bronchitis, ulcers, raynaud's disease, and allergic skin reactions.

- Polyvinylpyrrolidone (PVP):carcinogenic and also can cause thesaurosis, a lung disease affecting some users of hairspray, causing enlarged lymph nodes, lung masses, and changes in blood cells. The disease is reversible if hair spray is avoided.

- Tetrafluoroethylene (teflon): can be irritationg to eyes, nose and throat, and can cause breathing difficulty; produces gases when burned, and also may produce these gases to a lesser degree when heated.

polychlorinated biphenyls (PCB): Cause dermatitis. Carcinogenic. Neurotoxic. Teratogenic. Used in some artist's oil paints

poly (methyl methacrylate): Skin, eye, and respiratory irritant. Limited evidence of carcinogenicity. Used in some adhesives.

polyoxyethylene oleyl ether: Moderate eye and skin irritant. Used in some air fresheners.

polystyrene resin solution: Flammable. Eye and skin irritant. Used in some adhesives.

propane: A flammable gas similar to butane used as a propellant in some aerosol spray products. *Flammable. Neurotoxic at high concentrations. An aerosol spray propellant used in a wide range of consumer products.

propoxur: Carcinogenic. Neurotoxic. Used in some home and garden pesticides.

propylene glycol methyl ether: Mild to moderate eye, skin, and respiratory irritant. Used in some carpet and car cleaning products.

propylene oxide: Flammable. Skin and eye irritant. Carcinogenic.Neurotoxic. Used in some adhesives.

proteinase: Allergenic. Used in some laundry soil and stain removers.

proteolytic enzymes: Mild eye irritant. May cause sensitization with symptoms ranging from mild hay fever and asthma to dermatitis Used in some laundry soil and stain removers

pyrethrin: One of the family of individual chemicals present in pyrethrin which give it insecticidal properties. Increasingly the term is also used in reference to synthetically manufactured chemicals which are similar to natural pyrethrins. Some of these synthetic pyrethrins are actually much more toxic and persistent than natural pyrethrins. Pyrethrins are commonly used in aerosol sprays for controlling
fleas, ants, flies, bees, and other common household insects.
*Allergenic. Neurotoxic. Used in some household and garden pesticides. As well as pet flea-control products.

pyrethrum: A extract from a type of chrysanthemum flower which exhibits strong insecticidal properties due to the presence of a series of chemicals called pyrethrins. The raw extract is only slightly toxic to humans, but concentrated pyrethrum powder is moderately toxic. Degrades to harmless substances in the presence of sunlight within about 24 hours or less.

Q

quaternary ammonium compound: Eye and skin irritant. Used in some all-purpose cleaners and laundry fabric softeners.

quaternary ammonium chloride: Cationic (positively charged) surfactants used as disinfectants and fabric softeners. Highly toxic in concentrated solutions, their toxicity decreases with dilution.

quaternary dicco: Slight fire hazard. Moderate to severe eye and skin irritant, in some cases it might cause skin burns and corneal damage to the eye. Used in some car interior and exterior cleaners and protectants.

quarternium 15: Eye and skin irritant. Allergen. Can release formaldehyde. Used in some hand and automatic dishwashing products.

R

resmethrin: Can cause sudden swelling of face, eyelids, lips, mouth and throat tissues, as well as hay fever-like symptoms. Neurotoxic. Used in some pet flea-control products

rotenone: Skin irritant. Carcinogenic. Neurotoxic. Tetrogenic. Used in some pet flea-control products

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S

silica: Naturally occurring crystals of silicon compounds. Toxicology inert except when inhaled. Some types of silica produce silicosis, a scarring of the lungs similar to that produced by asbestos. Crystalline silica can also cause lung cancer (NTP,1991). Many forms of silica are used in consumer products, not all of which are equally dangerous. Often used as abrasives in scouring powders, polishes, etc.

silicon dioxide: Eye and skin irritant. Used in some auto products.

silicone emulsion: Slight fire risk. Used in some interior and exterior car cleaners and protectants.

sodium bicarbonate (baking soda): A slightly toxic, slightly alkaline salt used as a leavening agent in baked goods, but also in many cleaning products. Considered an excellent, environmentally safe abrasive cleaner.

sodium bisulfate: Corrosive and damaging to the eyes, skin, and internal tissues if ingested. Can cause asthma attacks. Used in some toilet bowl cleaners and deodorizers.

sodium carbonate (soda ash, washing soda): A moderately toxic and alkaline salt used in powdered laundry detergents and automatic dishwasher detergents to boost the performance of the surfactants. Primarily responsible for the alkalinity of these products. Does not biodegrade, but not thought to be particularly dangerous to the environment.

sodium dichloroiscyanurate dihydrate: Corrosive. Severe eye, skin, and respiratory irritant. Can form chlorine gas that can cause burning and watering of the eyes, as well as burning of the nose and mouth. Used in some toilet bowl cleaners and deodorizers.

sodium 2,4-dichlorphenoxyacetate (2,4-D): Irritant, Sensitizer. Carcinogenic. Neurotoxic. Terotogenic. Used as a herbicide in lawn care products.

sodium dithionate: Eye, skin, and respiratory irritant. Used in some spot removers.

sodium dodecylbenzene sulfonate: Eye and skin irritant. Used in some laundry soil and stain removers.

sodium hydroxide (lye): A corrosive alkaline salt used in drain cleaners and oven cleaners and responsible for their hazardous properties. Not particularly harmful to the environment if diluted or neutralized with an acid. Lye is used in the manufacture of soap, but in that process the lye reacts chemically and loses its hazardous properties.
*corrisive. Eye, skin, and respiratory irritant. When highly concentrated as used in some drain openers and oven cleaners, it can burn eyes, skin, and internal organs. Can be fatal if swallowed. Used in a wide range of household cleaners.

sodium hypochlorite (bleach): The source of available chlorine in liquid chlorine bleach, which is a 5% solution of sodium hypochlorite in water. Also found in mildew removers, disinfecting cleaners, and toilet bowl cleaners. Its bleaching action arises from its ability to oxidize (chemically remove) stains. Household bleach is not systemically toxic or corrosive, but is a strong skin, eye, and respiratory irritant. Ingestion has proved serious or fatal in a few cases, but is not usually so. Sodium hypochlorite is chemically reactive, forming hazardous vapors if mixed with any products containing ammonia or with any acids. Although most of the hypochlorite breaks down into harmless compounds, a few percent of the material combines with chemicals in soil and wastewater to form chlorinated compounds such as chloroform and carbon tetrachloride that are toxic or persistent.
*Corrosive. Eye, skin, and respiratory irritant. Sensitizer. Can be fatal if swallowed. Especially hazardous to people with heart conditions or asthma. Used in a wide range of household cleaners.

sodium lauryl sulfate: A common surfactant in household cleaners and personal care products. It is readily biodegradable but, like other surfactants, is a skin and eye irritant and is toxic to fish.

sodium metasilicate: A highly alkaline salt used in some powdered laundry and dishwashing detergents to boost cleaning power. Moderately toxic and a skin/eye irritant, it is considered an environmental problem.
*Corrosive. Severe Eye, skin and respiratory irritant. Inhalation of dust can cause throat and lung damage. Used in some driveway and garage floor cleaners.

sodium ortho-phenylphenol: Eye and skin. Carcinogenic. Used in some bathroom cleaners.

sodium silicate: Can be corrosive .Can cause burns to the eyes and tissue damage to the skin, as well as cause burns to the mouth, throat, and stomach if swallowed. Used in some automatic dishwashing detergents and car interior and exterior cleaners and protectants.

sodium sulfate: Corrosive. Severe eye, skin and respiratory irritant. Can cause asthma attacks. Used in some toilet bowl cleaners and deodorizers.

solvent: A solvent is any material which is used to dissolve another. Although water is most common solvent, generally when the term solvent is used to describe an ingredient, it refers to so-called "organic solvents" such as petroleum distillates, alcohols or chlorinated hydrocarbons. Organic solvents are usually quite hazardous.
*solvents (uncharacterized): Eye, skin and respiratory irritant. Neurotoxic. Used in some paint removers and strippers.

solvent orange 3 dye/solvent red 49 dye: Carcinogenic. Used in some shoe polishes

starch: Allergenic. Used in some laundry starches

stoddard solvent: Slight fire hazard. Eye and mucous and membrane irritant. Neurotoxic. Used in some auto, floor wax, and shoe products

sulfur: Poses minimal risk for eye, skin, and respiratory irritation, as well as nausea and allergic sensitization. Frequently used in least-toxic pesticides, especially for organic gardening, sulfur products are some of the safest chemicals available for use — for both people and the environment

surfactant (note: not "surfacant): The primary ingredient in most cleaners. Surfactants improve the penetrating power of water, create suds, and dissolve grease. The name is a conjunction of the terms surface active ingredient, which describe its function. Most surfactants are skin and eye irritants, and most are quite toxic to aquatic animals, hence the importance of their biodegradability. Surfactants are classified as anionic, nonionic, or cationic on the basis of their electrical charge.
*surfactants (uncharacterized): Eye irritant. Used in a wide range of household cleaning products.

T

talc: Carcinogenic when inhaled. Used in some home and garden pesticides.

teratoxins: agents that may cause birth defects. (eg: alcohol)

tetrachloroethylene (perchloroethylene): Eye, skin, and respiratory irritant. Carcinogenic. Neurotoxic. Used in some spot removers

tetrachlorvinphos: Eye and skin irritant. Carcinogenic. Used in some pet flea-control products.

tetrahydrofuran: Irritant to eyes and mucous membranes. Neurotoxic. Can cause injury to liver and kidneys. Used in some adhesive products.

tetramethrin: Eye and skin irritant. Can cause sudden swelling of face, eyelids, lips, mouth, and throat tissues, as well as hay fever-like symptoms. Neurotoxic. Used in some pet flea-control products.

tetrasodium EDTA: Eye irritant.Used in some bathroom cleaners.
titanium dioxide:limited evidence of carcinogencity Hazardous, not as a liquid, but as a dust (as when paint containing titanium dioxide is being sanded or scraped). Used in some paints and shoe polishes

toluene (note: not "tolulene"): An aromatic ring solvent, similar in structure to benzene, though not a carcinogen. Stronger central nervous system depressant than benzene. Commonly used in adhesives, paint removers, paints, marker pens. Highly flammable.
*Eye and skin irritant. Can cause cardiac sensitization. Neurotoxic. Reproductive effects. Used in some spot removers and art products.

trichloroethane (TCA): Usually refers to 1,1,1-trichloroethane, sometimes called methyl chloroform. Once a common ingredient in aerosol sprays, adhesives, spot removers, electrical parts

cleaners, and automotive products, TCA has been phased out under the Montreal Accord, an international agreement on protecting the ozone layer. Acute toxicity is only moderate, but chronic exposure can cause birth defects. A serious and frequent groundwater pollutant and an ozone depleting chemical.
Moderate skin and severe eye irritant Can cause cardiac sensitization. Neurotoxic. Reproductive effects. Used in some spot removers and art products.

tri (dimethylaminomethyl) phenol: Eye and skin irritant. May cause skin sensitization. Used in some adhesives.

triethanolamine (TEA): Eye and skin irritant. Can react with nitrates (added as undisclosed preservatives to some products or their raw materials or present as contamimants) to form carcinogenic nitrosamines. Nitrosamines have been shown to readily penetrate the skin. Used in some liquid all-purpose cleaning cleaning products,metal polishes, spot removers, and other household cleaning products.

tripropylene glycol monomethyl ether: Prolonged and repeated skin exposure to large doses can result narcosis and kidney injury. Used in some floor cleaners and waxes, and polishes.

trisodium nitrilotriacetate: Carcinogenic. Used in some bathroom cleaning products.

turpentine: A solvent distilled from the gum of pine trees and used as a paint thinner. Highly volatile, flammable, and quite toxic by all routes of exposure. Accidental ingestion can cause aspiration into the lungs and subsequent chemical pneumonia. Products with more than 10 % turpentine require special labeling by CPSC
*Flammable. Eye irritant. Can cause allergenic sensitization. Neurotoxic. Can cause serious irritation of the kidneys. Used in some furniture polishes, auto, art, and shoe products.

U

urea: Skin irritant. Allergen. Used in some laundry soil and stain removers.

V

vinegar & lemon juice: Are acid and they neutralize alkaline ,or caustic ,substances.

vm&p naphtha: Eye and skin irritant. Neurotoxic. Used in some furniture polishes.

W

washing soda: A chemical neighbor of baking soda, washing soda (sodium carbonate) is much more strongly alkaline, with a ph around 11, and is a heavy duty cleaner. It is mined much like baking soda, but processed differently. Because is quite Caustic, it cannot be called non-toxic, and you should wear rubber gloves when using it. It releases no harmful fumes and is far safer than a commercial solvent formula. Washing soda cuts grease, cleans petroleum oils and dirt, removes wax or lipstick, and softens water. Can cause eye burns with potential injury on prolonged contact. Used in some laundry detergents.

white mineral oil: Eye and skin irritant. Neurotoxic. Used in some furniture polishes.

X

xylene: A solvent closely related to toluene, but more toxic. Used in paints, glues, marker pens, degreasers, pesticides, and many other products. Highly flammable.
*Severe eye and moderate skin irritant. Significant neurotoxic effects. Reproductive effects. Used in some spot removers, car cleaners, paints, and
other consumer products.

Z

zinc naphthenate: Similar to copper naphthenate, a wood preservative. Relatively low toxicity, but zinc may have adverse effects on aquatic life. Usually formulated with petroleum distillates, which are probably responsible for major toxicity of products to humans.