

HAZARDOUS CHEMICALS

Listing of Substances Whose Hazardous Nature Is Greater Than Their Potential Usefulness

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|-----------------------------|----------------------------|
| Acryl nitrite | Phosphorus (red and white) |
| Ammonium chromate | Phosphorus peroxide |
| Aniline | Picric Acid |
| Aniline hydrochloride | Potassium sulfide |
| Anthracene | Pyridine |
| Antimony trichoride | Pyrogatic Acid |
| Arsenic | Selenium |
| Arsenic chloride | Silver cyanide |
| Arsenic peroxide | Silver oxide |
| Arsenic trichoride | Silver nitrate |
| Asbestos | Sodium azide |
| Benzene | Sodium chromate |
| Calcium cyanide | Sodium, metal |
| Calcium fluoride | Sodium nitrite |
| Chlorine | Stannic chloride |
| Chloroform | Steeric Acid |
| Chromium | Strontium |
| Chromium oxide | Strontium nitrate |
| Dichlorobenzene | Sudan IV |
| Dichloroethane | Talc |
| Dimethanline | Tannic Acid |
| Ethylene dichloride | Tetrabromoethane |
| Ethylene oxide | Uranium |
| Gunpowder | Uethane |
| Hydrobromic Acid | Wood's metal |
| Hydrofloric Acid | |
| Indigo carmine | |
| Lead arsenate | |
| Lithium, metal | |
| Lithium nitrate | |
| Magnesium, metal powder | |
| Mercury (and its compounds) | |
| Methylene | |
| Methyl iodine | |
| Methyl methacrylene | |
| Methyl orange | |
| Methyl red | |
| Nickel oxide | |
| Nicotine | |
| Paris green | |
| Phenol | |

**Chemicals Whose Toxicity,
Carcinogenicity, Flammability,
And/Or Explosive Propensity
Preclude Their Use In A School
Setting**

Acetamine
Acid green
Aluminum chloride
Ammonium bichoromate
Antimony
Barium chloride
Benzene
Bromine
Cadmium compounds (all)
Chromic Acid
Chromium acetate
Cobalt, metal
Cobalt nitrate
Cyclohexane
Cycloethane
Dichloroindophenol sodium salt
Ferrous sulfate
Formaldehyde
Formalin
Fuchsin
Gasoline
Hydrogen sulfide
Iso-butyl alcohol
Magnesium chlorate
Mercury compounds (all)
Methyl cleate
Paradichlorobenzene
Pentane
Petroleum ether
Potassium chlorate
Potassium permanganate
Sodium bromate
Sodium floride
Sudan III
Sulfamethazine
Toluene
Trichloroethylene
Urethane
Xylene
asbestos

4-Nitrobiphenyl
alpha-Naphthylamine
Methyl chloromethyl ether
3,3'-Dichlorobenzidine (and its salts)
bis-Chloromethyl ether
beta-Naphthylamine
Benzidine
4-aminodiphenyl
Ethyleneimine
beta-Propiolactone
2-Acetylaminofluorene
4-Dimethylaminoazobenzene
N-Nitrosodimethylamine
Vinyl chloride
Inorganic arsenic
Cadmium
Benzene
Coke oven emissions
1,2-dibromo-3-chloropropane
Acrylonitrile
Ethylene oxide
Formaldehyde
Methylenedianiline
1,3-Butadiene
Methylene Chloride

Explosives

Benzoyl Peroxide
Carbon Disulfide
Diisopropyl Ether
Ethyl Ether
Perchloric Acid
Picric Acid
Potassium Metal

Peroxide Forming Chemicals

Acetal
Cyclohexene
Decahydronapthalene
Diacetylene
Dicyclopentadiene
Diethyl ether
Diethylene glycol
Dimethyl ether
Dioxane

Divinyl acetylene
Ether (glyme)
Ethylene glycol dimethyl ether
Isopropyl ether
Methyl acetylene
Sodium amine
Tetrahydrofuran
Tetrahydronaphthalene
Vinyl ethers
Vinylidene chloride

Sodium amatol
Sodium nitrate-potassium
Styphnic acid
Tetrazene
Trimonite
Trinitrobenzene
Trinitro compounds
Urea nitrate

High Energy Oxidizers

Listing of Shock Sensitive Chemicals

Acetylides of heavy metals
Amatol Ammonal
Ammonium Nitrate
Ammonium perchlorate
Ammonium picrate
Butyl teyrel
Calcium nitrate
Dinitro compounds
Dipicrylamine
Fulminate / fulminating compounds
Heavy metal azides
Hexogen
Lead azide
Lead picrate
Mercury tartrate
Mononitrotoulene
Nitrated carbohydrates (Nitroglycerin, nitrated glucoside, nitroglycol, etc.)
Organic amine nitrates
Organic peroxides
Picric acid compounds
Poly-nitro aliphatic compounds
Silver azide

Ammonium perchlorate
Ammonium permanganate
Barium peroxide
Bromine
Calcium chlorate
Calcium hypochlorite
Chlorine anhydride or chromic acid
Chlorine trifluoride
Dibenzoyl peroxide
Fluorine
Hydrogen peroxide
Magnesium perchlorate
Nitric acid
Nitrogen peroxide
Perchloric acid
Potassium bromate
Potassium chlorate
Potassium perchlorate
Potassium peroxide
Propyl nitrate
Sodium chlorate
Sodium chlorite
Sodium perchlorate
Sodium peroxide

Meanings of Physiological Classifications

Irritants: These are materials that cause inflammation of mucous membranes. Examples of irritants are: ammonia, alkaline dusts and mists, hydrogen chloride, hydrogen fluoride, halogens, ozone, phosgene, diethyl/dimethyl sulfate, nitrogen dioxide, phosphorous chlorides, and arsenic trichloride. They can also cause changes in the mechanics of

respiration and harm lung function. Chemicals that cause this type of irritation include: Acetic acid, acrolein, formaldehyde, formic acid, iodine, sulfur dioxide, and sulfuric acid.

Asphyxiants: These are inert gases that displace oxygen, or reduce the body's ability to absorb, transport, or utilize inhaled oxygen. Examples include: Nitrogen, nitrous oxide, carbon dioxide, hydrogen, helium, carbon monoxide, and cyanides.

Anesthetics: Chemicals that have a depressant effect on the central nervous system. Examples include: Halogenated hydrocarbons and alcohols.

Hepatotoxic agents: Chemicals that may damage the liver. Examples include: Carbon tetrachloride, tetrachloroethane, and nitrosamines.

Nephrotic agents: Chemicals that may damage the kidneys. Examples include: Halogenated hydrocarbons and uranium compounds.

Neurotoxic agents: Chemicals that damage the nervous system. Examples include: Trialkyl tin compounds, tetraethyl lead, methyl orange, methyl mercury, carbon disulfide, organic phosphorus insecticides, thallium, and manganese.

Blood and Hematopoietic agents: These agents damage the blood and/or bone marrow. Examples include: Nitrates, aniline, toluidine, nitrobenzene, and benzene.

Pulmonary agents: These agents cause fibrotic changes and damage pulmonary tissue. Examples include: Coal dust, cotton dust, wood dust.

Carcinogenic agent: These agents cause the proliferation of malignant neoplastic cells. Known carcinogens include: Asbestos, alpha-naphthylamine, dichlorobenzidine, vinyl chloride, ethylene oxide, methyl chloromethyl ether, inorganic arsenic, and coal tar derivative volatiles.

Teratogen agent: These are chemicals that interfere with normal embryonic development without killing the fetus or damaging the mother. Examples include: lead and thalidomide.

Sensitizer agents: These are chemicals that cause allergic reactions in normal tissue after repeated exposure to that chemical. Examples include: Epoxies, nickel compounds, poison ivy, toluene diisocyanate, chromium compounds, and chlorinated hydrocarbons.