

OSHA List of Hazardous Chemicals

The U.S. Occupational Safety and Health Administration maintains a list of highly toxic and hazardous chemicals found in work environments that can affect employee health. OSHA requires the manufacturers of these substances to develop safety labels and Material Data Safety Sheets that outline safety measures for exposure. Employers are expected to maintain a binder for employee review that contains these safety sheets on each hazardous substance used on site.

Biological Hazards Biological hazards pose a serious risk to human life. Pathogens such as bacteria, plasmids, fungi, viruses and parasites -- and the toxins that they make -- are all biological hazards. OSHA details the standards that employers must enforce to protect workers on the job from biological hazards. This could include recommendations for immunizations, gloves and facemasks as well as avoiding contact with blood or bodily fluids.

Compressed Gas Gases Gases expand when they are exposed to heat. When compressed gases such as helium and oxygen are exposed to heat higher than 70 degrees Fahrenheit while stored at a pressure that exceeds 40 pounds per square inch, they expand and can blow out of their containers, causing massive collateral damage and fatal accidents.

Corrosive Chemicals Corrosive chemicals, such as hydrochloric acid and very strong basic chemicals such as lye can burn or eat away at human flesh and inorganic materials such as steel. Corrosive substances cause irreversible harm and physical damage to the surfaces they meet. OSHA keeps a list of corrosive chemicals and the standards for using them.

Flammable Materials Liquids or solids that ignite at 100 degrees Fahrenheit or lower, and those that ignite or catch on fire easily and can sustain the fire, or keep burning once they do combust, are considered flammable materials. Some flammable materials emit toxic gases and smoke into the air when they catch fire and are detrimental to human health. Flammable materials and liquids include aerosols, nitromethane, acetone, isopropanol, ethanol, gasoline, natural gas, propane and butane.

Moderate Poisons

- Chemical substances that are harmful and can make people sick when they are exposed to them are considered moderate poisons. Small amounts of exposure can make people sick, but generally, contact with them is not fatal. Moderate poisons include materials such as lead, vinyl chloride and heavy metals such as arsenic, mercury and cadmium.

Radioactive Materials

- Radioactive materials such as radon, radium, uranium, plutonium and thorium are metals that emit radiation. Radiation kills off living cells in the human body. Too much exposure to radiation can make people ill, or give them radiation poisoning. Overexposure to radiation can be fatal. If the person who is overexposed does not die right away, he can develop cancer or other health complications that can take his life.

Severe Poison

- OSHA lists severe poisons as chemical substances that cause critical or grave reactions in the human body. Generally, exposure to a small amount of the severe poison is required for it to be deadly. Severe poisonous materials include hydrogen sulfide, nitrogen dioxide and hydrogen cyanide, bromine, chlorine, fluorine, cyanide and nitriles.

Water Reactive and Oxidizers

- Some chemicals react with water and release a flammable or toxic gas. An oxidizer is a chemical substance that releases oxygen and is used to ignite combustible or flammable organic material. Examples include peroxide, nitrates and hypochlorites