

## **OSHA Health Hazard Definitions**

### **ACUTE TOXICITY**

Acute toxicity refers to those adverse effects occurring following oral or dermal administration of a single dose of a substance, or multiple doses given within 24 hours, or an inhalation exposure of 4 hours.

### **SKIN CORROSION/IRRITATION**

Skin corrosion is the production of irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following the application of a substance for up to 4 hours. Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, over time, by discoloration due to blanching of the skin, hair loss, and scars.

Skin irritation is the production of reversible damage to the skin following the application of a substance for up to 4 hours.

### **SERIOUS EYE DAMAGE/EYE IRRITATION**

Serious eye damage is the production of tissue damage in the eye, or serious physical decay of vision, following application of a substance to the surface of the eye, which is not fully reversible within 21 days of application.

Eye irritation is the production of changes in the eye following the application of a substance to the surface of the eye, which are fully reversible within 21 days of application.

### **RESPIRATORY OR SKIN SENSITIZATION**

Respiratory sensitizer means a chemical that will lead to hypersensitivity or an allergic reaction of the airways (usually a restriction) following inhalation of the chemical.

Skin sensitizer means a chemical that will lead to an allergic response following skin contact.

### **CARCINOGENICITY**

Carcinogen means a substance or a mixture of substances which induce cancer or increase its incidence. Substances and mixtures which have induced benign and malignant tumors in well-performed experimental studies on animals are considered also to be presumed or suspected human carcinogens unless there is strong evidence that the mechanism of tumor formation is not relevant for humans.

### **REPRODUCTIVE TOXICITY**

Reproductive toxicity includes adverse effects on sexual function and fertility in adult males and females, as well as adverse effects on development of the offspring.

For classification purposes, the known induction of genetically based inheritable effects in the offspring is addressed in Germ cell mutagenicity

### **GERM CELL MUTAGENICITY**

Germ cell mutagens may cause mutations in the germ cells of humans (male sperm or female eggs) that can be transmitted to offspring. A mutation is defined as a permanent change in the amount or structure of the genetic material in a cell.

**SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE**

Specific target organ toxicity—single exposure, means specific, non-lethal target organ toxicity arising from a single exposure to a chemical. The adverse health effects include toxicologically significant changes which affect the function or morphology of one or more tissues/organs, or have produced serious changes to the biochemistry or hematology of the organism. Specific target organ toxicity can occur by any route that is relevant for humans, i.e., principally oral, dermal or inhalation.

**SPECIFIC TARGET ORGAN TOXICITY REPEATED OR PROLONGED EXPOSURE**

Specific target organ toxicity— repeated exposure means specific target organ toxicity arising from repeated exposure to a substance or mixture. These adverse health effects include toxicologically significant changes which affect the function or morphology of one or more tissues/organs, or have produced serious changes to the biochemistry or hematology of the organism. These health effects may be reversible or irreversible, immediate and/or delayed. Specific target organ toxicity can occur by any route that is relevant for humans, i.e., principally oral, dermal or inhalation.

**SIMPLE ASPHYXIANT HAZARD**

Simple asphyxiants are substances or mixtures that displace oxygen in the ambient atmosphere and can cause oxygen deprivation in those who are exposed, leading to unconsciousness and death.

**ASPIRATION HAZARD**

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration. Aspiration means the entry of a liquid or solid chemical directly through the oral or nasal cavity, or indirectly from vomiting, into the trachea and lower respiratory system.