

Training Manual	
Subject: Chemical Training – Second Quarter, Chemical Hazards	Number: 5.038

Chemical Hazards can be broken down into two categories: Physical and Health. Each category can then be broken down further into smaller subcategories.

Physical Hazards- corrosives, flammables, combustibles, explosives, reactives, oxidizers

Corrosive – A substance that causes visible destruction or permanent changes in human skin at the point of contact. Corrosives can either be an Acid, a substance with a pH less than 7, a Base (Alkaline) a substance with a pH of greater than 7, or a Neutral, a substance with a pH of 7.

Flammable - A substance with a flash point below 100 degrees Fahrenheit. A flash point is the lowest temperature at which a substance may ignite.

Combustible – A substance with a flash point above 100 degrees Fahrenheit.

Explosive – A substance that will suddenly release pressure, gas, heat, and light when exposed to a sudden shock.

Reactive – A substance with the ability to undergo a chemical reaction or change which may then cause a hazardous side effect.

Oxidizer – A substance that reacts specifically with oxygen to create a chemical reaction.

Health Hazards – carcinogens, irritants, toxins, sensitizers

Carcinogen – A substance capable of causing or producing cancer.

Irritant – A substance which is not corrosive, but does cause inflammation of tissue

Toxic – A substance which is harmful and can cause illness.

Sensitizer – A substance which may cause an allergic reaction.

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