

Chemical Survey Definitions

Aerosol- A product that is dispensed from an aerosol container by a propellant. Aerosol Products shall be classified by means of calculation of their chemical heats of combustion and shall be designated Level 1, Level 2, or Level 3. (Class 2)

- Level 1- Those with a total chemical heat combustion that is less than or equal to 8,600 Btu/lb. (20 Kg/g)
- Level 2- Those with a total chemical heat combustion that greater than 8,600 (20 Kg/g), but less than or equal to 13,000 Btu/lb. (30 Kg/g)
- Level 3- Those with a total chemical heat of combustion that is greater than 13,000 Btu/lb. (30 Kg/g)

Combustible Liquid- A liquid having a closed cup flash point at or above 100°F. Combustible liquids shall be subdivided as follows.

- Class II- Liquids having a closed cup flash points at or above 100°F and below 140°F.
- Class IIIA- Liquids having a closed cup flash point at or above 140°F and below 200°F.
- Class IIIB- Liquids having a closed cup flash point at or above 200°F.

Corrosive- A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the point of contact.

Cryogenic Fluid- A liquid having a boiling point lower than -150°F at 14.7 psia.

Explosive- A chemical compound, mixture of device, the primary or common purpose of which is to function by explosion. The term includes, but is not limited to, dynamite, black powder, pellet powder, initiating explosives, detonators, safety fuses, squibs, detonating cord, ignitor cord, igniters, and display fireworks.

Flammable Gas- A material that is a gas at 68°F or less at 14.7 psia of pressure which:

1. Is ignitable at 14.7 psia when in a mixture of 13% or less by volume with air; or
2. Has a flammable range at 14.7 psia with air of at least 12%, regardless of the lower limit.

Flammable Liquefied Gas- A liquefied compressed gas which, under a charge pressure, is partially liquid at a temperature of 68°F and which is flammable.

Flammable Liquid- A liquid having a closed cup flash point below 100°F. Flammable liquids are further categorized into a group known as Class I liquids.

- Class IA- Liquids having a flash point below 73°F and a boiling point below 100°F
- Class IB- Liquids having a flash point below 73°F and a boiling point at or above 100°F
- Class IC- Liquids having a flash point at or above 73°F and below 100°F.

Oxidizer- A material that readily yields oxygen or other oxidizing gas, or that readily reacts to promote or initiate combustion of combustible materials and, if heated or contaminated, can result in vigorous self-sustaining decomposition

- Class 4- an oxidizer that can undergo an explosive reaction due to contamination or exposure to thermal or physical shock and that causes a severe increase in the burning rate of combustible materials with which it comes into contact. Additionally, the oxidizer causes a severe increase in

the burning rate and can cause spontaneous ignition of combustibles.

- Class 3- An oxidizer that will cause a severe increase in the burning rate of combustible materials in which it comes in contact.
- Class 2- An oxidizer that will cause a moderate increase in the burning rate of combustible materials with which it comes in contact.
- Class 1- An oxidizer that does not moderately increase the burning rate of combustible materials.

Poison – Less dangerous poisons, toxic – Substances, liquid, or solids (including pastes and semi-solids) so toxic to man that they are a hazard to health during transportation.

Poison gas – Extremely dangerous poisons, highly toxic poisonous gases, or liquids – a very small amount of the gas, or vapor of the liquid, mixed with air is dangerous to life.

Radioactive material (yellow 111 label) – Any material, or combination of materials, that spontaneously gives off ionizing radiation.

Spontaneously combustible material – (Solid) A solid substance (including sludges and pastes) which may undergo spontaneous heating or self-burning under normal transportation conditions. These materials may increase in temperature and ignite when exposed to air.