What is a MSDS?

A Material Safety Data Sheet, or MSDS, is a document that provides information about the hazards of a chemical or product. They vary in style and content, but all contain certain required sections. State and Federal law requires that all manufacturers and distributors of chemical products provide the end user with a manufacturer specific MSDS. The primary method of accessing MSDSs at CSU Stanislaus is through a web-based database: **http://csustan.chemwatchna.com/**

The goal of the MSDS is to provide the user with a summarized, multi-source resource that informs the user of certain basic but necessary pieces of information regarding the substance they are about to use. The MSDS informs the user about the material's physical properties and related health effects, personnel protective equipment necessary to protect the user, first aid treatment necessary in the event of an exposure, how to respond to accidents, and the planning that may be necessary in order to safely handle a spill.

How to Read a Material Safety Data Sheet

The Material Safety Data Sheet, or MSDS, is written information that can help protect you from overexposure to chemicals you find on the job. The MSDS is a mandatory part of the University hazard communication program. Each chemical producer can design its own MSDS form, and the sections may be in different order. But, the basic kinds of information on any MSDS will be the same.

- Chemical Name
  Lists the identity of the substance (the name on the label), date the MSDS was prepared, the name and address of the manufacturer, and usually a phone number for emergencies and more information.

- Hazardous Ingredients/Chemical Identity
  Includes names of substance in the chemical that might be dangerous, and safe exposure limits such as Permissible Exposure Limit or PEL (set by OSHA) or the Threshold Value Limit or TVL. Also lists common names for the chemical.

- Physical Characteristics
  Describes many physical qualities of the chemical, and lets you know what's usual or safe. For example, how the chemical looks and smells; boiling and melting temperatures (important in case a chemical might become a gas you could breathe); evaporation rate (known as percent volatile); how easily the chemical dissolves; and how heavy it is (this tells you if it will sink, float, or dissolve in water.)

- Fire and Explosion Data
  Tells you the lowest temperature when the chemical could catch fire (flash point). Lets you

know if it's flammable (catches fire below 100 degrees F) or combustible (catches fire above 100 degrees F). Lists the best way to put out a fire involving that chemical.

- Reactivity

  Describes what happens if this chemical comes in contact with air, water, or other chemicals. Describes conditions (like heat) or materials (like water) that can cause the chemical to react by burning, exploding, or releasing dangerous vapors. The chemical is called “incompatible” or “unstable” with these conditions or substances.

- Health Hazards

  Lists ways the chemical might enter you body, like splashing on your skin or being breathed in as vapor as well as possible symptoms of overexposure. Lets you know if overexposure might make existing medical conditions worse, and describes emergency first aid procedures.

- Usage, Handling, And Storage

  Describes how to clean up an accidental spill, leak, or release, including special procedures. Tells you how to handle, store and dispose of chemicals safety. Remember, if there is an accident, notify our supervisor immediately, and take care of it yourself only if you are trained to do so and are wearing the proper equipment.

- Special Protection And Precautions

  Explains special Personal Protective Equipment to use when working with the chemical special procedures, extra health or safety information, signs that should be posted, and other information not covered in other sections.

Required Information on a MSDS:

(A) The Chemical Name
(B) Any Common Names
(C) The CAS Number of the "Hazardous Substance
(D) The Potential for Explosion
(F) The Potential for Reactivity
(G) Acute and Chronic Health Effects
(H) Potential Routes of Exposure
(I) Symptoms of Overexposure
(J) Proper Precautions
(K) Handling Practices
(L) Necessary Personal Protective Equipment
(M) Other Safety Precautions in the Use of or Exposure to the "Hazardous Substance"
(N) Emergency Procedures for Spills
(O) Emergency Procedures for Fire
(P) Disposal Procedures
(Q) First Aid Procedures Risks Posed by the "Hazardous Substance"
(R) A Description in Lay Terms of the Specific Potential Health

(S) The Month and Year the Information was Compiled
(T) Name and Address of the Manufactures Responsible for Preparing the Information