

MAJOR PROGRAM POINTS

"THE ANSI MATERIAL SAFETY DATA SHEET"

**Training for the
OSHA HAZARDOUS WASTE OPERATIONS
and EMERGENCY RESPONSE (HAZWOPER) REGULATION**

Quality Safety and Health Products, for Today...and Tomorrow

Outline of Major Points Covered in the "The ANSI Material Safety Data Sheet" Course

The following outline summarizes the major points of information presented in the course on "The ANSI Material Safety Data Sheet". The outline can be used to survey the course before taking it on a computer, as well as to review the course when a computer is not available.

- **Like it or not, hazardous chemicals are part of our lives.**
 - Many of us work around them every day.
- **To protect ourselves we take precautions such as:**
 - Wearing personal protective equipment.
 - Using safe work practices.
- **But we still need to know what to do if something goes wrong, such as a:**
 - Leak.
 - Spill.
 - Fire.
- **The answers to these and other important questions can be found on a hazardous chemical's Material Safety Data Sheet (MSDS).**
- **The MSDS is a "guide" for the safe use of a hazardous chemical. It provides information about:**
 - Handling.
 - Storage.
 - Transportation.
 - Safe work practices.
- **Not all MSDS's are "created equal".**
 - They come in a variety of formats.
 - Information is arranged in different ways.
 - This can sometimes make them difficult to use.
- **To help with this problem the American National Standards Institute (ANSI) created a standard MSDS format.**
 - This is known as the ANSI MSDS.

- **The ANSI MSDS answers four basic questions about a potentially hazardous chemical:**
 - What is the material and what are its hazards?
 - What should I do if a problem occurs when I am working with this material.
 - What precautions should I take to help prevent problems?
 - Are there any other important things I should know about the material?
- **Section I of the ANSI MSDS lists:**
 - Commonly used names of the chemical.
 - The name, address and telephone number of the manufacturer (so you can get more information).
- **Section II provides information on all of the material's Hazardous Ingredients.**
 - Other, non-hazardous ingredients may also be included.
- **Section III identifies the hazards of the material. It first provides an "emergency overview" for quick and easy access, which gives the following information:**
 - Physical form.
 - Color.
 - Odor.
 - Hazards that demand immediate attention in an emergency, with associated warnings.
- **The next part of Section III lists "potential health effects":**
 - Routes of entry (the ways the material can get into the body, such as inhalation or ingestion).
 - Symptoms you might experience if you are exposed to the material.
 - Target organs (specific parts of the body) that are most likely to be affected by the chemical.
 - The type of health effects you could experience and their severity.

- **Sections I, II and III answer the first basic question about the chemical:**
 - "What is the material and what are its hazards?"
- **Section IV helps to prepare you in case an accident occurs:**
 - It describes first aid measures you can take.
 - A "note to physicians" may also be included (describes specific medical treatment that may be required after first aid).
- **Section V of the ANSI MSDS provides information on fighting fires that involve the chemical, such as:**
 - "Flammable properties" which helps fire fighters determine how to safely deal with the materials.
 - Types of fire extinguishers that should be used are also listed here.
 - It also instructs fire fighters on how to minimize the hazards the material may present in a fire.
- **Section VI tells you what to do in case of "accidental releases", such as leaks or spills.**
 - Includes information about spill containment.
 - Describes clean-up procedures.
 - Also gives information about decontaminating clothing and equipment.
- **To review, Sections IV, V and VI of the ANSI MSDS provide information on what to do if you run into problems when working with a hazardous chemical.**
- **The next sections in the ANSI MSDS discuss how to prevent problems from occurring when working with the material.**
- **Section VII covers handling and storage practices.**
 - These are often the same instructions that appear on the chemical's container label.

- **Section VII also describes the proper storage conditions for the material, including:**
 - Exposure to light.
 - Vibration in the storage area.
 - Ventilation.
 - Temperature.
 - Humidity.
 - Atmospheric pressure.

- **Section VIII of the ANSI MSDS addresses exposure controls and personal protection.**
 - It includes "engineering controls", such as exhaust ventilation systems.
 - It also describes personal protective equipment that should be worn, such as safety glasses, gloves, etc.
 - Safety professionals refer to the "exposure guidelines" information in this section to determine what protection is appropriate for each job where the chemical is used.

- **Section IX of the ANSI MSDS describes the physical and chemical properties of the material.**
 - Your employer uses this information to help determine the safe work practices for your facility.

- **Section X indicates whether the material is chemically stable, or unstable, under normal conditions.**
 - It describes what conditions may make the material become unstable.
 - It also indicates whether the material may "react" with another substance to create a hazardous situation.

- **Sections XI through XVI of the ANSI MSDS provide safety and health professionals with technical information on the material.**
 - Most employees won't need to consult these sections on a regular basis.
 - You should still become familiar with them in case you need the information they contain.

- **These sections include information on:**
 - The toxicology of the chemical.
 - Potential ecological affects.
 - Disposal considerations.
 - How to transport the chemical safely.
 - Regulatory information associated with the chemical.

- **These sixteen sections make up the ANSI MSDS.**
 - Not all MSDS's are structured this way.
 - But all MSDS's contain the same kinds of information.

- **Remember that there are other sources of information on hazardous materials.**
 - Read all container labels and warning stickers.
 - Observe all posted warning signs.
 - Be familiar with your company's Hazard communication program, standard operating procedures and Emergency Plan.
 - If you still have questions, talk to your supervisor or safety manager.

- **Material Safety Data Sheets make it possible to work with chemicals safely.**
 - Know where MSDS's are kept in your facility.
 - Read MSDS's before you work with hazardous chemicals.
 - Consult the MSDS while you work if you have any questions.
 - In case of emergency, know where to find vital information on an MSDS.
 - When in doubt, ask for help.