PLAINTIFF'S EXHIBIT

RS-357

WORKING SAFELY WITH CHEMICALS

HAZARD COMMUNICATION PROGRAM



How To Use Material Safety Data Sheets And Warning Labels

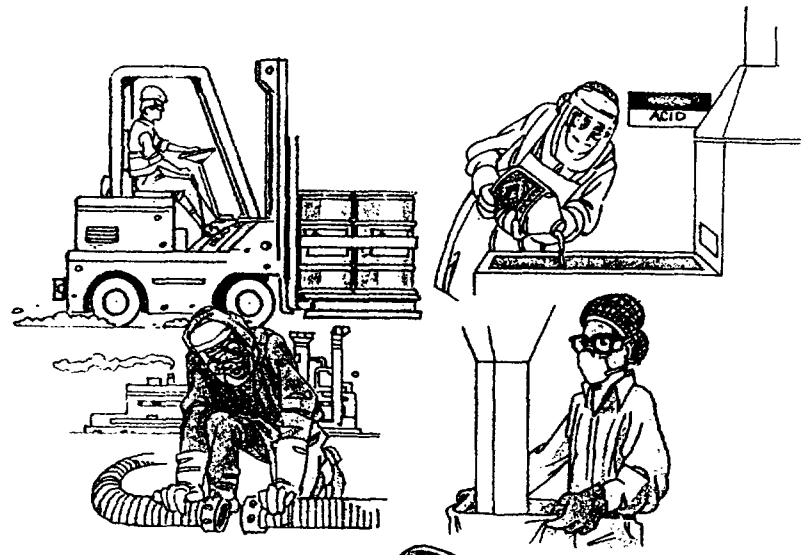
RS-003697
1/17/02
NUECES

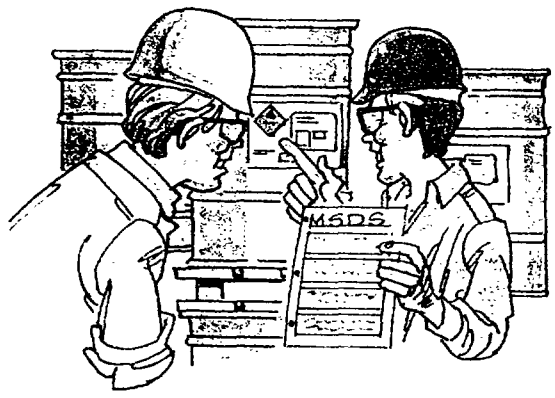
HAZARD COMMUNICATION: THE EXTRA STEP

Gas in your car, chlorine in the pool, fertilizer, oven cleaner...Chemicals are part of today's high quality of life and a necessary part of many work environments. Your company's hazard communication program can help you better understand the chemicals you handle. Material Safety Data Sheets, warning labels, employee training—each part of the program is an extra step toward preventing injuries and keeping you healthy and safe on the job.

For Your Health and Safety

The best way to protect your health and safety is to know about each of the chemicals you work with. Some chemicals can explode or start fires. Others can cause skin rashes, breathing problems, or more serious illnesses. But if you handle hazardous chemicals carefully, following the right precautions, these chemicals can be handled safely.







Read the MSDS and Label

You can help prevent illness and injury by reading the Material Safety Data Sheet (MSDS) and warning label for each chemical you use. These give you key health and safety information about the hazardous chemicals in your work area. Your company makes MSDS's and labels available to you, but the program can only work with your help and cooperation.

Work Smart: Take Part

Work smart by taking part in your company's program. Your company teaches you safe work practices for handling chemicals, how to use personal protective equipment, and first aid procedures in case of an accident. Since your health is in your hands, be sure you understand your job training and ask any questions you have about handling chemicals safely.

This booklet is not intended to replace your company's health and safety policies. Only your company can establish the specific guidelines appropriate for your job.

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YOUR HAZARD COMMUNICATION PROGRAM

Communicating about chemical hazards is nothing new: the information on MSDS's and warning labels has been around as long as the chemicals have. Your company is simply taking the extra step to be sure you're familiar with its complete hazard communication program. You can take full advantage of the program when you know more about each of its parts: hazard evaluation, warning labels, MSDS's, employee training, and a written program.

Hazard evaluation.
Chemical producers review scientific studies and provide an updated warning label and MSDS for each hazardous chemical in your workplace.

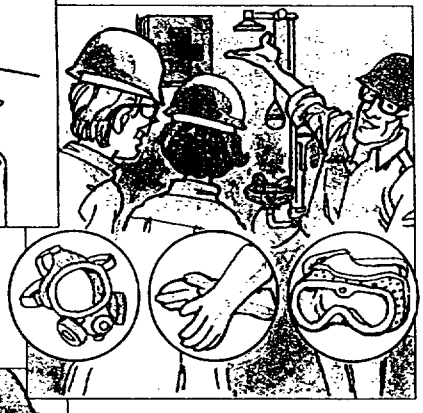


Warning labels. Each warning label lists the chemical name, hazardous ingredients, hazard warnings, and the chemical manufacturer's name and address.





MSDS's. Each MSDS gives you more detailed health and safety information, precautions for handling, and emergency and first aid procedures. The MSDS's for hazardous chemicals you're handling are available in your work area.



Employee training.
Your company teaches you how to handle chemicals safely and how to use personal protective equipment. Your company also explains first aid and emergency procedures in case of accidental overexposure, and shows you where to find the MSDS's if you need them.



Written program.
Your company has a written program outlining the steps it's taking to communicate with you about hazardous chemicals. The program includes an updated inventory of the hazardous chemicals on site.

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HOW TO USE A MATERIAL SAFETY DATA SHEET

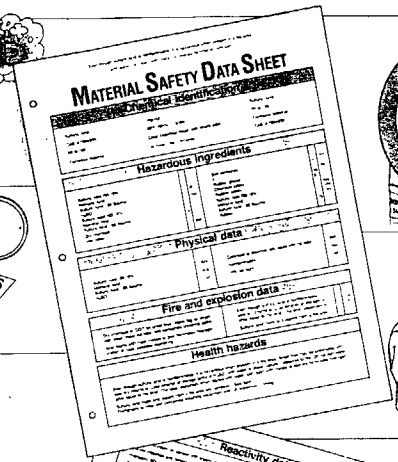


The MSDS for each hazardous chemical in your work area tells you how to use, handle, and store the chemical safely. Each MSDS may look a little different, but all give you the same basic information. This sample MSDS for sulfuric acid shows what you can find out from reading an MSDS. If you have any specific questions after reading the MSDS, you can check with your supervisor.



Chemical identification. The first section of the MSDS helps you identify the chemical. It lists the name of the chemical, any trade names, and the chemical manufacturer's name and address. This section may also list an emergency phone number.







Reactivity data. Here you'll find whether the chemical "reacts" with materials or conditions. **Incompatibility** lists the materials, such as water or other chemicals, that cause the chemical to burn, explode, or release dangerous gases. **Instability** lists the environmental conditions, such as heat or direct sunlight, that cause a dangerous reaction.

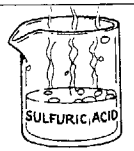
Hazardous ingredients. This section lists what's in the chemical that can harm you. It also lists the concentration of the chemical to which you can safely be exposed, often listed as the **permissible exposure limit** (PEL) or the **threshold limit value** (TLV). These safe exposure limits are usually figured for average exposures over a typical work shift.

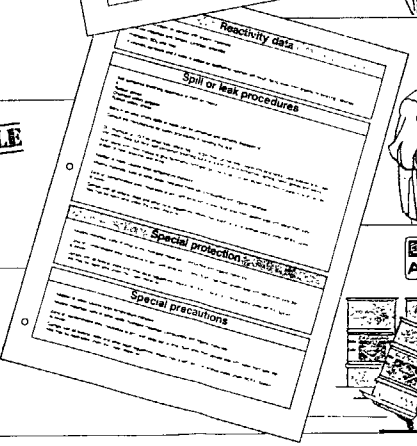




Spill or leak procedures. This section tells you what to use to clean up an accidental spill or leak. No matter what the chemical is, always notify your supervisor right away. Before cleaning up a chemical spill, you may need to wear respiratory protection, gloves, safety goggles, or protective clothing. This section may also include notes on how to dispose of the chemical safely.

Physical data. This section describes the chemical's appearance, odor, and other characteristics. **Percent volatile,** for instance, is how much of the chemical evaporates at room temperature. Sulfuric acid has a low percent volatile, but it can be harmful if inhaled. Respiratory protection or extra ventilation may be needed.



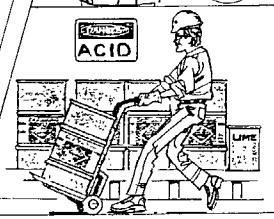




Special protection. Here you'll find a listing of any personal protective equipment (respiratory protection, gloves, eye protection) you need to work safely with the chemical. If protective equipment is needed, this section may list the specific types that are recommended, such as a full-face mask respirator, rubber gloves, and chemical safety goggles.

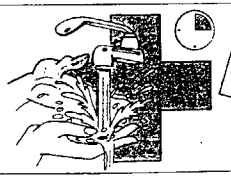
Fire and explosion data. Here you can find at what temperature the chemical ignites, called the **flash point.** If a chemical is **flammable,** it ignites below 100° F. If it's **combustible,** it ignites at 100° F or above. This section also lists **extinguishing media**—what will put out the fire safely—such as water spray, foam, or other type of fire extinguisher.





Special precautions. This section lists any other special precautions to follow when handling the chemical. This may include what to have nearby to clean up a spill or put out a fire, and what safety signs to post near the chemical. This section also lists any other health and safety information not covered in other parts of the MSDS.

Health hazards. This section lists symptoms of overexposure, such as a skin rash, burn, headache, or dizziness. It also tells you first aid and emergency procedures in case of overexposure, such as flushing your exposed skin with running water for 15 minutes. It may also list any medical conditions that can be aggravated by exposure to the chemical.



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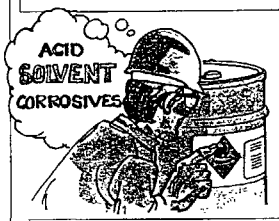
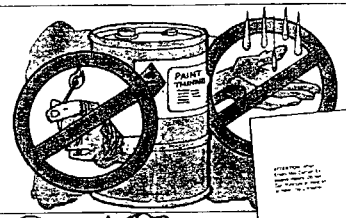
HOW TO USE A WARNING LABEL

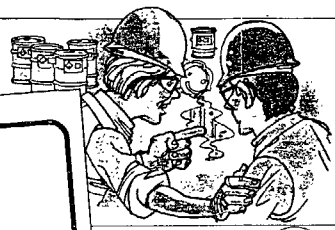


The chemical you see today may not have been in your shop six months ago, or may be a different or stronger blend. So always check the warning label before handling any chemical. All labels list basic warnings. Others, like this sample label for paint thinner, give more detailed precautions. If you have any questions about a hazardous chemical after reading the label, you can check the MSDS.



Basic warnings. The warning label lists the chemical names, hazardous ingredients, and the name and address of the chemical manufacturer. It also lists general warnings, such as to keep the chemical away from flame and avoid skin contact.

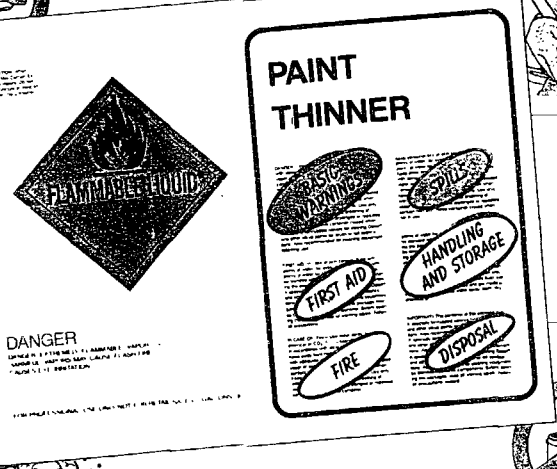




Spills. There may be a section on how to handle spills. For any spill, contact your supervisor right away and put out any source of nearby flame. You may need to wear personal protective equipment to clean up a spill.

First aid. The label may explain what to do if you splash the chemical in your eyes or on your skin. You may need to flush your eyes at an eyewash station for 15 minutes or wash contaminated skin in a full-body shower.

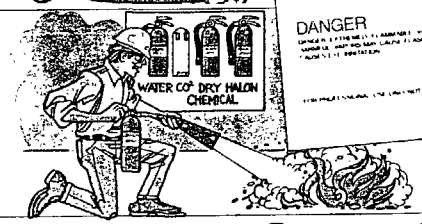


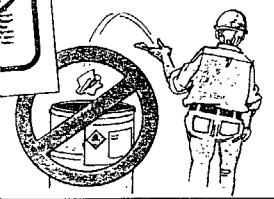




Handling and storage. The label may list the personal protective equipment, such as gloves, safety goggles, or a respirator, that you need to handle the chemical safely. The chemical may also need to be stored with extra ventilation or away from other chemicals.

Fire. The label may tell you what to use to put out an accidental fire. There are four different types of fire extinguishers: water spray, carbon dioxide, dry chemical, and Halon. Using the wrong one can spread the fire rather than put it out, so be sure you check the warning label.





Disposal. Treat empty containers as if they're full, and don't fill them with anything else! Empty containers can be hazardous, since they often hold residues that can burn or explode. Follow the label and your company policy on how to dispose of empty containers.

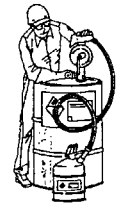
Non-labeled Containers

If a container doesn't have a warning label, don't handle the chemical until you know what it is. Report to your supervisor, who can find out what the chemical is and provide a warning label if the chemical is hazardous.



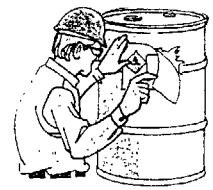
Transfer Containers

If you move a hazardous chemical from its primary container to a new one, be sure your transfer container is labeled. Then your coworkers will know how to handle it safely, too.



Torn Labels

If a label is torn, damaged, or misplaced, ask your supervisor to replace it. Remember, the only way you can handle a chemical safely is if you know what it is.



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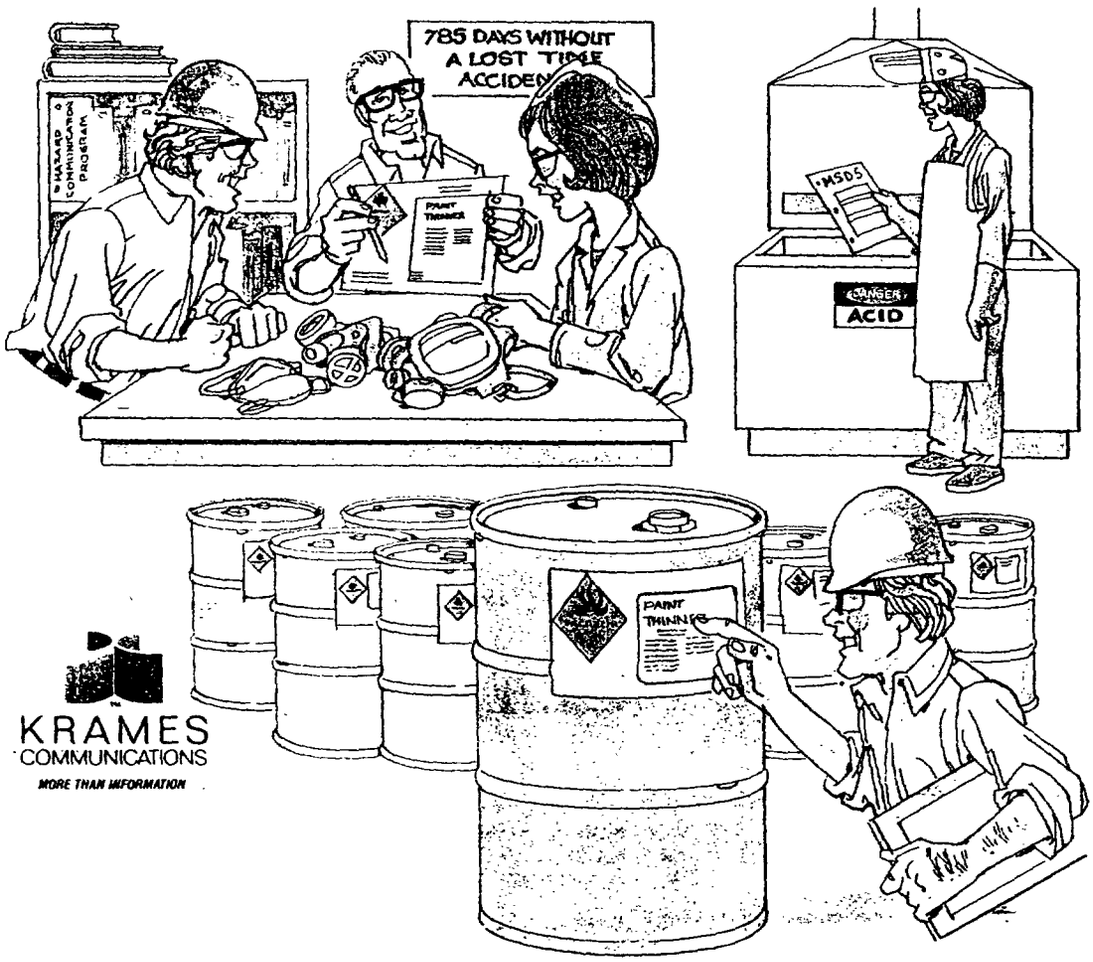
HAZARD COMMUNICATION TAKES TEAMWORK

Your company's hazard communication program has been designed with your health and safety in mind. But the program can only work if you help. Your company provides Material Safety Data Sheets and warning labels, and teaches you how to use them, so you'll know how to handle chemicals safely. You can do your part by reading the MSDS and warning label for each hazardous chemical you handle. Working together can help keep your workplace safe.



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