



---

## Introduction to Safety – Unit Two: Hazard Awareness and Communications

### Lab 2: Interpreting MSDS

---

Student Name: \_\_\_\_\_

#### Description of Topic

Many companies have chemicals that are used in the manufacturing process. Because many types of chemicals are dangerous, OSHA requires that information be provided for each one, that containers have warning labels, and that the company provide training to their employees who work with chemicals or hazardous materials.

The information about each chemical is recorded in a materials safety data sheet, or MSDS. The type of information includes:

- Firefighting measures
- Physical properties (appearance, smell, etc.)
- Handling and storage
- Disposable considerations

There are also various labels that are put on the containers that have chemicals inside. They are an abbreviated version of the MSDSs, making it possible to quickly learn about the chemicals inside.

#### Objective

- The student must be able to use and locate vital information on MSDS documents and labels.

#### Lab Assignment

1. The instructor will distribute a 9 and a 16-section MSDS document on a specific chemical or hazardous materials to the student.
2. The instructor will choose several types of information (such as how to clean up a spill) for students to find on the MSDS document.
3. After completing the assignment, students should verify their answers with classmates in the classroom, or as a “discussion assignment” online in the learning management system.
4. After students have become familiar with using and locating vital information on the MSDS, the instructor will distribute samples of product labels that are placed on containers.
5. The students are required to provide information on their observations about what labels are correct, and which ones are wrong. Submit your answers to your instructor.





## Introduction to Safety – Unit Two: Hazard Awareness and Communications

### Lab 2: Interpreting MSDS

#### Grading Rubric

Below is an example of a rubric to implement when evaluating the performance of individual students for each of the laboratory exercises.

	Excellent 5 pts	Good 4 pts	Fair 3 pts	Poor 2 pts	Unacceptable 1 pts	Grade Received (N/A)
<b>Ability to Follow Directions</b>	Excellent  Followed directions to the letter.	Good  Followed directions.	Fair  Moderately followed directions.	Poor  Did not follow directions.	Unacceptable  Did not appear concerned with directions.	Grade Received
<b>Demonstrate Knowledge of Tools</b>	Excellent  Student knows and is able to identify and explain necessary tools for completion of the project.	Good  Student is able to identify and explain necessary tools for completion of the project with some assistance.	Fair  Student is unable to identify or use tools without major prompting.	Poor  Student is not able to both identify and use tools.	Unacceptable  Student's use of tools posed a danger to self and others.	Grade Received
<b>Level of Needed Assistance</b>	Excellent  Student was able to complete the task without assistance.	Good  Student was able to complete the task with little assistance.	Fair  Student was able to complete the task with moderate assistance.	Poor  Student was unable to complete task without major assistance.	Unacceptable  Student was unable to complete task with assistance.	Grade Received





**Introduction to Safety – Unit Two: Hazard Awareness and Communications**  
*Lab 2: Interpreting MSDS*

	<b>Excellent 5 pts</b>	<b>Good 4 pts</b>	<b>Fair 3 pts</b>	<b>Poor 2 pts</b>	<b>Unacceptable 1 pts</b>	<b>Grade Received (N/A)</b>
<b>Student Preparedness</b>	Excellent  Student had/gathered all materials and was completely ready to go to work.	Good  Student had/gathered most materials and went to work.	Fair  Student had/gathered most materials, however, they needed excess time to do so.	Poor  Student did not have/gather some of the needed materials to perform work.	Unacceptable  Student did not have/gather the needed materials and was unable to perform work.	Grade Received
<b>Time Management</b>	Excellent  Routinely used time well throughout the project to get the job done on time.	Good  Used time fairly well throughout the project.	Fair  Procrastinated somewhat but did get the job done on time.	Poor  Was unable to adequately meet timeline due to inability.	Unacceptable  Did not meet timeline due to procrastination or wasting time.	Grade Received





**Multi-State  
Advanced Manufacturing  
Consortium**

US DOL SPONSORED TAACCCT GRANT: TC23767  
PRIMARY DEVELOPER: Jim Martini – Henry Ford College

RELEASE DATE 3/18/2016  
VERSION v 001  
PAGE 4 of 4

---

## **Introduction to Safety – Unit Two: Hazard Awareness and Communications**

### *Lab 2: Interpreting MSDS*

---

#### **SAFETY DISCLAIMER:**

M-SAMC educational resources are in no way meant to be a substitute for occupational safety and health standards. No guarantee is made to resource thoroughness, statutory or regulatory compliance, and related media may depict situations that are not in compliance with OSHA and other safety requirements. It is the responsibility of educators/employers and their students/employees, or anybody using our resources, to comply fully with all pertinent OSHA, and any other, rules and regulations in any jurisdiction in which they learn/work.

M-SAMC will not be liable for any damages or other claims and demands arising out of the use of these educational resources. By using these resources, the user releases the Multi-State Advanced Manufacturing Consortium and participating educational institutions and their respective Boards, individual trustees, employees, contractors, and sub-contractors from any liability for injuries resulting from the use of the educational resources.

#### **DOL DISCLAIMER:**

This product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.

#### **RELEVANCY REMINDER:**

M-SAMC resources reflect a shared understanding of grant partners at the time of development. In keeping with our industry and college partner requirements, our products are continuously improved. Updated versions of our work can be found here: <http://www.msamc.org/resources.html>.

