



HAZARD COMMUNICATION RIGHT-TO-KNOW PROGRAM (OSHA 1910.1200)

Department of Environmental Health & Safety

Phone: (410) 296-7593
Fax: (410) 296-5076
Emergency: (410) 704-2133
Email: Safety@towson.edu
Website: <http://wwwnew.towson.edu/adminfinance/facilities/ehs/>

REVISED JUNE 2009

TABLE OF CONTENTS

I. Introduction	3
II. Program Management	4
III. Participating Personnel	5
IV. Faculty/Staff Responsibilities	6
V. Hazardous Locations	7
VI. Chemical Inventory	7
VII. Hazard Labeling	8
VIII. Material Safety Data Sheets (MSDS)	9
IX. Employee Training & Information	11
X. Non-Routine Tasks	15
XI. Contractors	15
XII. Trade Secrets	15
XIII. Documentation	15
XIV. Program Evaluation/Quality Assurance	16

APPENDICES

Appendix A – OSHA Hazard Communication Standard Title 29 CFR 1910.1200 and COMAR 09.12.33, Access to Information About Hazardous and Toxic Substances (Right-to-Know).....	17
Appendix B – Map of Campus with Hazardous Locations Identified.....	19
Appendix C – Chemical Container Labeling.....	21
Appendix D – NFPA Labeling System.....	23
Appendix E – Shipping & Receiving Label Check System.....	26
Appendix F – Sample Label for use on Portable Containers.....	28
Appendix G – Training Lesson Plan.....	30
Appendix H – Employee RTK Training Verification Form.....	33
Appendix I – Procedures for the Safe Storage of Chemicals.....	35
Appendix J – Contractor RTK Form.....	37
Appendix K – Procurement Addendum to Towson University Contracts....	39

I. INTRODUCTION

It is the policy of the Towson University to provide a safe workplace for its employees based on guidelines established by OSHA and the State of Maryland.

Towson University has developed this program to assure that each of its employees receive the information and training they need so they may work safely with hazardous chemicals found in the workplace. This program is the primary tool for providing hazard communication to our employees. It contains policy, guidelines and procedures that determine how every aspect of the program is achieved.

This written program is based on the OSHA Hazard Communication Standard, Title 29 Code of Federal Regulations 1910.1200 and State of Maryland "Access to Information About Hazardous & Toxic Substances (Right-to-Know)" COMAR 09.12.33 regulations as well as additional requirements instituted by TU.

The components of the program are as follows:

- Program introduction
- Program management
- Participating personnel
- Faculty/Staff Responsibilities
- Hazardous locations
- Chemical Inventory
- Hazard labeling
- Material safety data sheets (MSDS)
- Employee Training & Information
- Non-Routine Tasks
- Contractors
- Trade Secrets
- Documentation
- Program evaluation/QA

▪ DISTRIBUTION

Copies of the abbreviated Program will be provided to all employees and to other persons under special circumstances. A copy of the entire program is available for review in Environmental Health & Safety (EHS) office located at 7400 York Road, 3rd floor. A copy of the program is also available on the internet at:

<http://wwwnew.towson.edu/adminfinance/facilities/ehs/HazardCommunicationRightToKnow.asp>

▪ QUALITY ASSURANCE AND UPDATES

If, at any time, employees have any questions or concerns about the program, they are encouraged to submit their comments in writing to the Program Coordinator in the Department of EHS. The Program Coordinator will

acknowledge employee comments in writing. Comments will be evaluated and appropriate action will be taken. In addition, this program will be evaluated frequently. This program will be updated and revised as new information and data become available.

II. PROGRAM MANAGEMENT

TU's program has a Program Coordinator with the authority to carry out its written requirements.

The objectives of the Towson University Hazard Communication Program are to:

- Eliminate illness and injury caused by chemical hazards;
- Ensure compliance with OSHA and MOSH regulations and;
- Ensure hazard information is communicated to employees who use chemical substances on campus.

The Department of EHS has been assigned the responsibility of implementing and maintaining the Hazard Communication Program, since this department already administers record keeping, medical surveillance and training for Towson University employees. Therefore, Towson University has the following responsibilities to all of its employees:

- To compile and maintain an alphabetical Chemical Information List (CIL) of all regulated chemicals and chemical products used on campus. This list shall include the manufacturer's name, chemical name, common name and location on campus.
- To ensure that the University has MSDS's for all regulated products in accordance with Federal and State regulations. In November 1985, all chemical product manufacturers were required by law to supply information regarding the safe use and handling of their products to all consumers. The result of this requirement has been the development of the Material Safety Data Sheet (MSDS).
- To develop and implement a written hazard communication program for the workplace, which outlines the University's program for meeting the requirements described in both the State and Federal regulations.
- To ensure that a label or other form of warning is legible, in English and prominently displayed on all containers.
- To provide an employee training and education program designed to inform all faculty/staff about the existence and content of this law; the hazard communication methods used by the University including MSDS's, the CIL, identifiers and placards; the rights an employee may exercise under this program; and the procedures by which an employee may obtain a copy of the CIL and/or a MSDS.

a. PROGRAM COORDINATOR

The primary Program Coordinator is the Manager of Environmental Safety. The Program Coordinator is responsible for overseeing the total program as well as these specific duties:

- Coordinate program implementation;
- Schedule training for existing personnel;
- Conduct training for new hires, temporary and contract personnel;
- Maintain all records and documentation generated by the program;
- Address all comments concerning the program;
- Conduct quality assurance audits on a scheduled basis;
- File all reports with the appropriate government authorities;
- Any other task affecting program maintenance;
- Handle requests for MSDS's and Chemical listings;
- Clear all new chemical procurements for Towson University.

b. OTHER KEY PERSONNEL

When the Program Coordinator is not in the office, another person must be available for questions and requests concerning the program. Two additional persons have been identified to assist the Program Coordinator with the responsibilities of the program. They are:

- Director, Department of EHS
- Assistant Director, Department of EHS

One of the above named personnel will always be available during operating hours for information regarding the program.

The Program Coordinator will have the responsibility for assuring that the program is properly managed and operated according to the guidance provided in the written program. This will be accomplished by a review of employee comments, safety records and QA audits.

III. PARTICIPATING PERSONNEL

Because of the nature of hazardous chemicals, it is the policy of TU to have all employees and contract personnel (as applicable) participate in the program.

For the purposes of this program, employees and work areas will be classified and grouped in order to better determine the level of participation and training employees will receive.

University personnel are grouped in the following classifications:

- Management
- Office
- Health/Safety
- Security
- Receive/ship
- Contract maintenance
- Academic (Professors, Stockroom personnel, staff)
- Maintenance (Grounds, Electric, Painters, Vehicle, Plumbers, etc)
- Contract landscapers
- Print shop
- Engineering

Work Areas at the University include:

- Shipping/receiving areas
- Printing rooms
- Administrative offices
- Laboratories (Art, Sciences, Photographic)
- Maintenance shops
- Power Plant

Because all personnel at one time or another must enter an area where hazardous chemicals are being used or stored, all personnel will participate in the program at some level.

IV. FACULTY/STAFF RESPONSIBILITIES

In order to ensure that this program is successful and in full compliance with the regulations governing it, all employees have the following responsibilities:

- To fully read the hazard warning label, chart, chemical lists or MSDS's located in your work area.
- To ensure that a label or other form of warning is legible, in English and prominently displayed on all containers in your work area.
- To carefully read and obey the warning labels on any containers.
- To contact the University's Department of EHS for copies of any MSDS's not found in your work area.
- To follow the approved handling and use procedures for each product, especially those dealing with personal protective equipment and clothing.
- To attend all training sessions.
- To notify EHS of new employees in their area who handle chemicals and should attend training.
- To ask your supervisor to contact EHS with any questions regarding this program or any chemical products in use in your area.

- To provide EHS with a copy of the MSDS for any products which you purchase and bring into the work area.
- To notify EHS of the amount and location of any new products which you purchase and bring into the work area.
- To provide a written inventory of chemicals in your area to EHS at least every 2 years.

V. HAZARDOUS LOCATIONS

It is the policy of TU to identify and mark locations where hazardous chemicals are used, stored or transported.

Hazardous chemicals can be found in the following locations:

- Receiving area
- Laboratories (Chemistry, Physics, Biology, etc.)
- Offices
- Printing shops
- Power Plant
- Studios (Art, Theatre, etc.)

See Appendix B for a campus map indicating these hazardous locations.

The Program Coordinator or his designee and/or the area/lab coordinator will re-inventory the locations once every 3 years to determine whether any areas that previously had no hazardous chemicals do contain them at that time, or if additional chemicals are now being stored. A survey form will be completed and a report generated listing the findings.

VI. CHEMICAL INVENTORY

It is the policy of TU to list all of the hazardous chemicals used/stored at the campus.

TU utilizes numerous chemicals in the daily activities at this campus. These chemicals have been listed in a database and can be reviewed in EHS's office located at 7400 York Road. Copies of the list will be made available upon written request. An employee and/or their designated representative(s) have the right to access the Chemical Information List (CIL) within one working day of receiving their written request (unless there is an emergency). Employees also have the right to one copy of the requested information or the means to make a copy, without charge, within five working days of written request.

As required, the Program Coordinator will review all submittals of new MSDS's to determine if any other chemicals have been added. If a new chemical has been added, the Program Coordinator will take the appropriate steps to revise the program and related documents.

This Chemical Information List (CIL) revised, alphabetized and submitted to the Maryland Department of Environment every two years. The Program Coordinator will resubmit our list every other March.

VII. HAZARD LABELING

TU will label all hazardous containers, as required, with the identity, hazard warning and manufacturer for each hazardous chemical container at the campus.

This program's objective is to have all hazardous chemicals labeled. The chemical user is responsible for ensuring all chemicals are labeled in their area. The Program Coordinator will provide assistance as requested.

Any hazardous chemical containers used, stored or transported at TU, shall contain all of the following information:

- Chemical name
- Hazard warning label
- Manufacturer's name and if possible, address

(See a copy of Towson University's "Chemical Container Labeling" guidelines in Appendix C.) If at some time a regulated chemical is introduced and used in the facility, it will be marked and labeled in accordance with OSHA regulations in addition to labeling required in this section. If the manufacturer's label is not present or if chemical is being used in a secondary container not provided by the manufacturer, it will be labeled immediately. (See Appendix F for a sample label.)

All labels and information on labels shall be written in English. If at some time TU employs workers who are unable to read English, the information will be added to the label in the employee's native language.

As part of the receiving procedures for hazardous chemicals, a receipt log shall be maintained. This log shall note date of receipt, contents, quantity, label check and initials. Under the "label check" will be a checklist of label information required in this section. This checklist is forwarded to EHS for each new chemical received on campus.

The Program Coordinator or his designee will check all container labels on a regular basis. If the labeling is improper, corrective action shall be taken immediately. In addition, employees are trained to report to their supervisor if a container is found with inadequate labeling, so corrective action can be taken.

a. REGULAR CONTAINERS (drums, etc.)

When hazardous chemicals arrive at TU, the containers will be checked against purchase order records immediately for the following information:

- Chemical identity
- Hazard warning

- Name and address of chemical manufacturer, distributor or importer

If the purchase order records verify the delivery, it will be accepted. Before being transferred to its destination, the labels shall be checked again to verify their adequacy. (See a copy of a sample purchase order stamped and checked by shipping and receiving in Appendix E.) If the labeling is inadequate, then the proper identity and hazard label will be permanently affixed to the container. When this has been completed, the original labeling shall be removed or permanently covered to avoid confusion. Under no circumstances shall container labeling be removed or covered before the proper labels are attached.

b. TANKS AND REACTION VESSELS

All hazardous chemical containers shall have the labeling required under this section, including storage tanks, pipes and reaction vessels where appropriate. Labeling on tanks and vessels shall be on permanently attached placards no less than one foot by one foot square. The labels shall be placed on the tanks and vessels at no higher than five feet and spaced horizontally every five feet for adequate viewing from all directions. Tanks and reaction vessels not labeled will have their contents discussed at employee training sessions.

c. PUMPS AND PIPES

All pumps and pipes used to transfer or transport hazardous chemicals will be labeled as appropriate. Pipes or piping systems that are not labeled will be discussed in employee training sessions as to their contents, potential hazards and safety precautions to be taken. Unlabeled pipes may be found all most anywhere on campus, particularly in mechanical rooms, the University Power Plant and areas where the Facilities Management personnel are assigned. In these work areas, employees can contact Facilities Management for further information.

d. TEMPORARY CONTAINERS

It is not usual University practice to use any other containers than the originals to transfer chemicals to storage or for use. However, if for any reason, another container, such as a bucket, drum, spray bottle, etc is used to temporarily store, use or transport a hazardous chemical, it shall be labeled according to this section. Once its use has been completed, it must be cleaned and the labels must be removed.

VIII. MATERIAL SAFETY DATA SHEETS (MSDS)

Accurate, up-to-date MSDS's shall be obtained, reviewed and updated, if necessary, for each hazardous chemical used at TU.

The objective of MSDS's is to provide the user (s) with:

- Safe handling procedures

- Personal protective equipment/measures to be used
- Storage requirements
- Potential health hazards if used incorrectly

TU relies on its chemical distributor or the manufacturer to supply MSDS's. Towson University will ensure that the MSDS is a fully completed OSHA Form 174 or equivalent. MSDS's shall be obtained prior to use of any hazardous chemical.

The Program Coordinator ensures that Towson University maintains an MSDS for hazardous materials on campus. Applicable MSDS's are available to all employees.

The Program Coordinator is responsible for acquiring and updating MSDS's. The Program Coordinator contacts the chemical manufacturer or vendor if additional research is necessary, or if an MSDS has not been supplied with an initial shipment. The Program Coordinator must clear all new procurements for Towson University. A master list of MSDS's is available from the Program Coordinator.

An employee and/or their designated representative(s) have the right to access to Material Safety Data Sheets within one working day of a written request (unless there is a medical emergency). Employees also have the right to one copy of the requested information or the means to make a copy, without charge, within five working days of written request. If Towson University fails to provide access to or a copy of the information about the hazardous chemical pursuant to the provisions of the law, an employee may refuse to work with the hazardous chemical. The employee, however, may not walk off the job or refuse to perform other duties while awaiting the requested information. Management cannot retaliate in any manner or willfully terminate the employment of any employee exercising their rights under this program.

a. NEW AND UPDATED MSDS

When new or updated MSDS's are received, the chemical user will forward a copy to the Department of EHS for review of completeness. This review will be based on the requirements set in 1200 (g) (2) (i-xii). If it is determined to be incomplete, then a revision will be requested from the manufacturer.

First-time use of hazardous chemicals shall not commence until an MSDS has been received, approved and distributed to the proper locations. Approved updates of MSDS's received from our distributors shall replace outdated MSDS's at all locations.

MSDS's will be maintained in the same form as they are received from the manufacturer or distributor. They are filed alphabetically, according to their common/trade name in EHS's office located at 7400 York Road.

b. LOCATION/AVAILABILITY

All MSDS's for the University will be maintained at Department of Environmental Health & Safety (7400 York Road 3rd floor).

Copies of site specific MSDS's may be maintained at:

- Dean/Chairperson Offices (optional)
- Supervisor Offices (optional)

However, the master copy of MSDS's for all chemicals shall be maintained at EHS's office. These copies of the MSDS's shall be available to all employees or their designees during normal facility operating hours at the above locations.

IX. EMPLOYEE TRAINING AND INFORMATION

All employees (including temporary, onsite contractual and part-time) and contractors shall receive information on TU's Hazard Communication Program. It is the contractor's responsible to train their employees in Hazard Communication/Right-to-Know procedures and TU's program.

The objective of employee training is to provide all personnel identified in this program with the necessary information and training to assist and abate the potential for injury, illness or death resulting from the inadvertent exposure to hazardous chemicals utilized at TU.

All those persons who handle chemicals as a result of their job duties at Towson University are required to attend Hazard Communication Training. Information and training will be provided based on job responsibility and risk. Employees must be trained on hazardous chemicals prior to their initial assignment to work with hazardous chemicals. Employees may receive up to four levels of instruction depending on the job and risk. These levels range from basic program information to hands-on materials handling training.

At least once per semester and during the summer, as well as when requested or required, the Department of EHS notifies campus departments that a training session will occur. The departments are required to notify EHS of new employees in their area who handle chemicals and should attend training. It is the department's responsibility to notify EHS of new employees during the semester.

EHS also requests a monthly new hire list from the Department of Human Resources to ensure that the campus departments do not miss newly hired employees who may handle chemicals. EHS contacts the individual or their department to find out if they handle chemicals during their regular job duties.

a. TRAINING PROGRAM STRUCTURE AND CONTENT

Towson University distributes the "Towson University Employee Safety Programs" (ESP) manual to all employees. The ESP states that TU has a written program and employees shall receive training as required. Employees

sign a form (in appendix H & J) that they have received the ESP. These signed records are kept in the department of EHS. A database of these signed records is also maintained by EHS.

Training is structured into four modules, identified as Hazard Communication Training HCT 1, HCT 2, HCT 3, HCT 4.

1. HCT 1

This is a general, but University-specific, program of orientation provided through TU's written ESP booklet. The ESP booklet will be distributed to all TU employees and shall include at a minimum:

- Summary of the Right-to-Know/Hazard Communication Standard
- Training requirements under the standard
- Summary of TU's training program
- TU's written Hazard Communication Program location
- Chemical inventory information and location
- Program/Alternate Program Coordinator
- Warning labels information
- Hazardous non-routine tasks
- Contractor responsibilities
- How employee can obtain MSDS's or chemical information
- Description and use of MSDS
- Towson University's rights and responsibilities under the standard
- The employee's rights under the standard
- Faculty and Staff's responsibilities

2. HCT 2

Instruction in this next level shall require the attendance of designated personnel at the Right-to-Know/Hazard Communication Training session. Topics to be discussed and explained shall include at a minimum:

- Review/discussion of the TU's Hazard Communication Program
- Physical and/or chemical health hazards of chemicals used, stored or transported on campus
- Methods of recognizing release or presence of hazardous chemicals on campus
- Control methods used by TU to reduce risk of exposure during normal and emergency situations
- Specific chemical hazard information (chemical hazard classes)
- Procedures for dealing with spills and other abnormal releases of chemicals
- Proper handling and storage techniques (See Appendix I for a copy of Towson University's "Chemical Storage Guidelines.")
- Special controls such as monitoring instrumentation and personal protective equipment (PPE)

- Labeling information and requirements including an explanation of the NFPA Diamond (See Appendix D and F).

3. HCT 3

Instruction at this level will consist of unique departmental training (UDT). The minimum instruction includes:

- Specific chemical operations instruction
- Chemical-specific emergency procedures such as spill clean up and disposal techniques
- Specific chemical hazard information including review of specific MSDS forms for hazardous chemicals utilized in the work area
- Control methods used to prevent contact with hazardous chemicals, such as personal protective gear
- Instruction on the use of personal protective equipment (PPE)

4. HCT 4

TU has identified training for the following non-routine task involving hazardous chemicals in its facility:

- Confined space entry and storage tank cleaning
- Swimming pool cleaning in Burdick Hall

The Maryland Fire and Rescue Institute (MFRI) (or other training agency as appropriate) conducts training for Confined Space Entry and Rescue. Facilities Management personnel conduct training for swimming pool cleaning. Additional training courses shall be developed for any additional non-routine tasks encountered. Training information will include (at a minimum):

- Protective/safety measures the employee can take;
- Measures that TU has taken to lessen the hazards, including ventilation, respirators, presence of another employee, etc.; and
- Emergency procedures.

b. NEW HAZARD TRAINING

When new hazards are introduced into the workplace, training will be given to personnel at the highest level at which they have previously been trained.

c. RETRAINING

Employees shall be given refresher training as needed. If hazards change or if the employee changes job requirements, retraining may be necessary. If an accident or incident occurs, retraining will be required to ensure it does not happen again.

d. PERSONNEL TRAINING REQUIREMENTS

The following is a matrix defining what training is given to what group of employees. These training assignments are subject to change based on personnel or supervisor requests.

<u>Employee Group</u>	<u>Codes:</u>
Management	M
Office	O
Health/Safety	H
Security	S
Maintenance Supervisors	MS
Maintenance Workers	MW
Receive/Ship	RS
Grounds/Transportation	GT
Professors/Assistants	PA
Printing/Art/Design Services	PAD
Contractors	C

EMPLOYEE TRAINING MODULE

Group Code	HCT 1	HCT 2	HCT 3	HCT 4
M	X	some	some	
O	X	some		
H	X	X	X	X
S	X	X	some	
MS	X	X	X	some
MW	X	X	X	some
RS	X	X	some	
GT	X	X	X	
PA	X	some	some	
PAD	X	X	X	
C	X	some		

e. TRAINING PROGRAM PRESENTATION

The Department of EHS presents HCT 1 and HCT 2. The Program/Alternate Coordinators, or their designee, will conduct the training session. The department/section supervisor or manager will conduct HCT 3. MSDS's and personal protective equipment is also covered in HCT 2-4.

A complete lesson plan, with lists of equipment, handouts, etc. is attached to this program in Appendix G.

It is the responsibility of the Program Coordinator and the Department of EHS to maintain training records.

X. NON – ROUTINE TASKS

When employees are required to perform hazardous non-routine tasks, such as cleaning tanks, entering our permit-required confined spaces or cleaning out the swimming pool, a special training session will be conducted to inform them regarding the hazardous chemicals to which they may be exposed and the proper precautions to take to reduce or avoid exposure. See the Hazard Communication Training Module 4 (HCT 4) section for training topics.

XI. CONTRACTORS

Contractors are provided with one copy of the ESP. The president or most senior company member signs off that they have received the ESP and will distribute it to their employees. (See Appendix J for a copy of the form that is signed by the Contractor.) Contractors are required to comply with all the programs listed in the ESP while on campus (See Appendix K for the Goldenrod Addendum to TU Contracts).

Each contractor bringing chemicals onsite must provide the Program Coordinator with the MSDS, appropriate hazard information on these substances (including the labels used) and the precautionary measures to be taken when working with these chemicals at least 2 weeks before the chemical is used on campus.

XII. TRADE SECRETS

It will be the policy of TU to request trade secret information on products being utilized on campus (as necessary) and provide that information to those requesting it under the existing regulations.

As the non-manufacturer of these materials, it will be necessary to request this information from the producer, in writing (unless there is a medical emergency) with reasonable detail as to why this information is being requested.

It will be the objective of TU to provide to the requesting individual(s) trade secret information pertaining to the hazardous chemical being utilized from the manufacturer. Additional details regarding obtaining trade secret information will be discussed on an individual basis with the personnel requesting it.

The Program Coordinator will review each request for trade secret information. It will be the responsibility of the Program Coordinator to determine University action on the subject.

XIII. DOCUMENTATION

TU shall make the forms and documents listed in this program available to employees on a written request basis.

All of the following information is maintained on a database at EHS:

- a. Participating Personnel
- b. Employee program records
- c. Hazardous locations
- d. Chemical Inventory
- e. MSDS
- f. Employee Information and Training

XIV. QUALITY ASSURANCE

It is the policy and responsibility of TU to do whatever is necessary to assure the effectiveness of our Hazard Communication Program.

For program quality assurance, the program as a whole must be reviewed. This requires frequent review by members of the Department of Environmental Health and Safety and random employee interviews.

It is the responsibility of the Program Coordinator to ensure frequent review is conducted. Ultimately, it is the responsibility of the President of Towson University to assure that this program is carried out.

APPENDIX A

Title 29 CFR 1910.1200
OSHA HAZARD COMMUNICATION STANDARD

AND

COMAR 09.12.33
ACCESS TO INFORMATION ABOUT HAZARDOUS &
TOXIC SUBSTANCES
(RIGHT-TO-KNOW)

OSHA LINK:

[HTTP://WWW.OSHA.GOV/PLS/OSHAWEB/OWADISP.SHOW_DOCUMENT?P_TABLE=STANDARDS
&P_ID=10099](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10099)

COMAR LINK:

[HTTP://WWW.DSD.STATE.MD.US/COMAR/09/09.12.33.00.HTM](http://www.dsd.state.md.us/comar/09/09.12.33.00.htm)

[HTTP://WWW.DSD.STATE.MD.US/COMAR/09/09.12.33.01.HTM](http://www.dsd.state.md.us/comar/09/09.12.33.01.htm)

[HTTP://WWW.DSD.STATE.MD.US/COMAR/09/09.12.33.02.HTM](http://www.dsd.state.md.us/comar/09/09.12.33.02.htm)

[HTTP://WWW.DSD.STATE.MD.US/COMAR/09/09.12.33.9999.HTM](http://www.dsd.state.md.us/comar/09/09.12.33.9999.htm)

APPENDIX B

MAP OF CAMPUS WITH HAZARDOUS LOCATIONS IDENTIFIED

APPENDIX C

CHEMICAL CONTAINER LABELING

CHEMICAL CONTAINER LABELING

All chemical containers must be labeled. The only exception is portable containers under the explicit control of the user at all times. If the container will be left alone for any reason, then it **must** be labeled.

Per the OSHA Hazard Communication Standard 29 CFR 1910.1200, the primary information on an OSHA-required label is the identity of the material, appropriate hazard warnings and the manufacturer:

1. **IDENTITY** - The identity may be a common or trade name ("Black Magic Formula"), or a chemical name (1,1,1-trichloroethane). The identity is the term which appears on the label, the MSDS, and the list of chemicals, and thus links these three sources of information.
2. **HAZARD WARNING** - The hazard warning is a brief statement of the hazardous effects of the chemical ("flammable," "causes lung damage").
3. **MANUFACTURER** - Name and address of the chemical manufacturer, importer, or other responsible party.



Labels must be **legible**, and prominently displayed in English.

Labels frequently contain other information, such as precautionary measures ("do not use near open flame"), but this information is provided voluntarily and is not required.

There are no specific requirements for size or color.

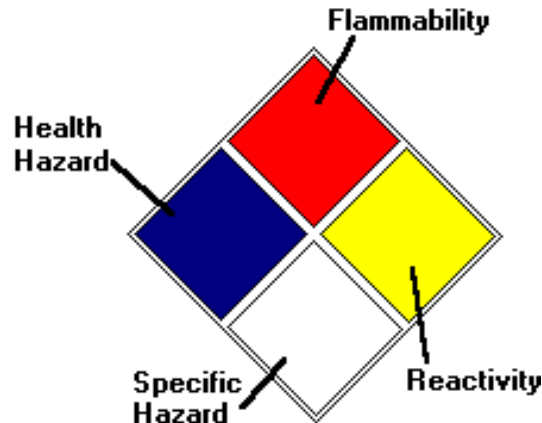
If you have any questions, please contact Environmental Health and Safety at 410-296-7593.

APPENDIX D

NFPA LABELING SYSTEM

NFPA LABEL

This is an example of a typical NFPA label. This system uses colors to represent the kind of hazard. Rating numbers are defined below.



Health Hazard (Blue)

- 4 - Materials that on very short exposure could cause death or major residual injury even though prompt medical treatment was given (example: Acrylonitrile, Bromine, Parathion).
- 3 - Materials that on short exposure could cause serious temporary or residual injury even though prompt medical treatment was given (examples: Aniline, Sodium hydroxide, Sulfuric acid).
- 2 - Materials that on intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical treatment was given (examples: Bromobenzene, Pyridine, Styrene).
- 1 - Materials that on exposure would cause irritation but only minor residual injury even if no treatment was given (examples: Acetone, Methanol).
- 0 - Materials that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible material.

Flammability (Red)

- 4 - Materials that: (a) rapidly or completely vaporize at atmospheric pressure and normal ambient temperatures and burn readily, or (b) are readily dispersed in air and burn readily (examples: 1,3-Butadiene, Propane, Ethylene oxide).
- 3 - Liquids and solids that can be ignited under almost all ambient temperature conditions (examples: Phosphorus, Acrylonitrile).
- 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur (examples: 2-Butanone, Kerosene).
- 1 - Materials that must be preheated before ignition can occur (examples: Sodium, Red phosphorous).
- 0 - Materials that will not burn.

Reactivity (Yellow)

- 4 - Materials that in themselves are readily capable of detonation or of explosive decomposition or reaction at normal temperatures and pressures (examples: Benzoyl peroxide, TNT, Picric acid).
- 3 - Materials that: (a) in themselves are capable of detonation or explosive reaction but require a strong initiating source, or (b) must be heated under confinement before initiation, or (c) react explosively with water (examples: Diborne, Ethylene oxide, 2-Nitro-propane).
- 2 - Materials that: (a) in themselves are normally unstable and readily undergo violent chemical change but do not detonate, or (b) may react violently with water, or (c) may form potentially explosive mixtures with water (examples: Acetaldehyde, Potassium).
- 1 - Materials that in themselves are normally stable but which can: (a) become unstable at elevated temperatures, or (b) react with water with some release of energy, but not violently (examples: Ethyl ether, Sulfuric acid)
- 0 - Materials that in themselves are normally stable, even when exposed to fire, and that do not react with water.

Specific Hazard (White)

This field designates special information about the material.

- OX - Denotes materials that are oxidizing agents. These chemicals give up oxygen easily, remove hydrogen from other compounds or attract negative electrons.
- W - Denotes materials that are water reactive. These compounds undergo rapid energy releases on contact with water.

If you have any questions, please contact the Department of Environmental Health and Safety at 410-296-7593.

APPENDIX E

SHIPPING & RECEIVING LABEL CHECK SYSTEM

2014



- Order Entry
- Products
- What's New
- Information Center

My Account Order Status
 logged in: rchilds@t
 It

Search for _____ within All of VWR.com Advanced Search MSDS

Home About VWR Site Map Literature Promotions Contact Us Request A Catalog

Shipping → Payment → Review → **CONFIRMATION**

ORDER CONFIRMATION

Thank you, Robert Childs, for shopping at VWR International. Your order has been placed.
 An order confirmation will be emailed to you when your order has been processed and a message will be sent when your order has been shipped.
 Please note: Some items may be back ordered.

Your Order Total is \$54.22. See details below.

Details for Order No. 20233476
 Order Comments:

Shipping Information
 Shipping Account Number: 2059090
 Robert Childs
 Ship To Attention: CH4-2014
 TOWSON UNIVERSITY
 SMITH HALL
 TOWSON, MD 21204
 US

Payment Information
 Visa
 42XXXXXXXXXX9627
 Exp. 04/2006
 Reference Number:

Items Ordered

17513
 T1827

Description	VWR Catalog No.	Unit Qty	Your Price	Availability	Extended Price
SOD CHLOR,XTL,REAG 500G CS-4	VW6430-1	CS (1) 4ea @ 13.56	\$54.22	In Stock	\$54.22
					Total: \$54.22

For questions relating to your order, please contact us or call 1-800-932-5000.

Home | Order Entry by VWR Number or by Any Number | Products | What's New | Information Center | Search
 About VWR | Site Map | Literature | Promotions | Contact Us | Privacy Policy

RECEIVED

Copyright © 2004 VWR International. All Rights Reserved

JAN 23 2004
 TOWSON UNIVERSITY
 SMITH HALL
 RECEIVING

CHEMICAL VERIFICATION				
DEPT.	CHEM	BLDG.	SMITH	
ITEM(S)	LABEL	MSDS	CONTAINER	COPY
1	Y	N	PLASTIC	4

COMPLETED ORDER

https://www.vwrsp.com/checkout2/payment/index.cgi?sid=136.160.161.2400.7065399501... 1/22/2004

APPENDIX F

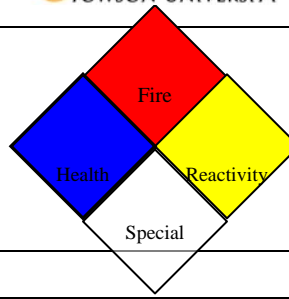
SAMPLE LABEL FOR USE ON PORTABLE CONTAINERS

IDENTITY:

HAZARD WARNING (Circle one):

- | | |
|-----------|--------------|
| FLAMMABLE | COMBUSTIBLE |
| IRRITANT | TOXIC/POISON |
| OXIDIZER | CORROSIVE |

OTHER:



MANUFACTURER:

Contact EHS @ 410-296-7593 for more info or the MSDS

APPENDIX G
TRAINING LESSON PLAN

RIGHT-TO-KNOW TRAINING OUTLINE

- I. Introductory Remarks (5 minutes)
- II. Review of the TU Hazard Communication Standard Program (15 minutes)

(PowerPoint presentation while students review Hazard Communication Program in ESP Booklet)
- III. Material Safety Data Sheet Review (15 minutes)

(PowerPoint presentation while students review sample MSDS given to them in training handouts.)
- IV. Activity “What’s Wrong with this Picture” (15 minutes)
- V. Short Quiz completed together (10 minutes)
- VI. Video (varied)

“Chemistry Lesson: Working Safely with Hazmats” or
“CHIT Chemical Safety Videos”
- VII. Questions, Answers and Concluding Remarks (5 minutes)

Section I Introductory Remarks

- Introduction of department personnel
- Explanation of EHS and responsibilities
- Brief explanation of reasons for the program:
 - Safety of all TU community members
 - Compliance with Federal and State Regulations
 - Part of TU Hazard Communication and safety programs

Section II Review of TU Hazard Communication Program

- PowerPoint presentation while students review Hazard Communication Program in ESP Booklet
 - University Responsibilities
 - Employee Rights
 - Faculty/Staff Responsibilities
 - NFPA Label and University Label
 - Definition of CIL, MSDS
 - Indicate Locations of CIL and MSDS files on campus
 - Complete Haz Com Program in EHS Office
 - Program Coordinator and Alternate Coordinator

Section III Material Safety Data Sheets (MSDS)

- PowerPoint presentation while students review sample MSDS given to them in training handouts.
 - Explain sections of MSDS
 - Emphasis that formatting will differ between companies

Section IV Activity “What’s Wrong with this Picture”

- Students view picture on PowerPoint presentation and discuss the wrong or right activities displayed.

Section V Short Quiz

- Completed together from PowerPoint slides
- Have each student answer at least one question

Section VI Video

- Depending on audience - show appropriate video

Section VII Conclusions

- Discuss any questions
- Have students complete and sign training verification form.

APPENDIX H

EMPLOYEE RTK TRAINING VERIFICATION FORM



**RIGHT TO KNOW TRAINING VERIFICATION
FORM**

Please print:

Name: _____ Department: _____

Title/Job: _____

I attended a training session on the University's Right To Know Program at the time and date listed below. This training included:

1. A summary of the OSHA Hazard Communication Standard.
2. My rights as an employee under the law.
3. A description of the University's Hazard Communication Program.
4. The location of the chemical information list and MSDSs.
5. Explanations of the proper methods of handling the chemicals with which I work.
6. Various types of chemical hazards which may be present in my workplace.

I also received a copy of the Hazard Communication Program "Employee Right To Know" pamphlet for Towson University.

Employee Signature

Employee Social Security #

Instructor

Date and Time

(White Copy – Environmental Health and Safety, Yellow Copy – Employee)

This information is collected for documentation purposes only. Failure to provide this data may result in improper identification of the individual participating in the activity. This information may be inspected, amended or corrected by contacting the Department of Environmental Health & Safety. This information is generally not available for public inspection. It will be shared only with other departments at Towson University, the University System of MD, the State of Maryland, the U.S. federal government, and with other entities permitted by law and/or as authorized by you.

APPENDIX I

**PROCEDURES FOR THE SAFE STORAGE OF
CHEMICALS**

LINK:

<http://wwwnew.towson.edu/adminfinance/facilities/ehs/documents/ProceduresfortheSafeStorageofChemicals.pdf>

APPENDIX J
CONTRACTOR RTK FORM



To: University Contractors
 From: Department of Environmental Health & Safety
 Re: Employee Safety Programs Manual & Campus Asbestos
 Containing Material (ACM) Locations

Towson University, in its commitment to the preservation of employee health and safety, is providing on-line for your reference the following documents. They can be accessed/viewed/downloaded from the Department of Environmental Health & Safety website at:
<http://wwwnew.towson.edu/adminfinance/facilities/ehs/EmployeeSafetyProgram.asp>.

Department of
 Environmental Health &
 Safety

Towson University
 8000 York Road
 Towson, MD 21252-0001

t. 410 296-7593
 f. 410 296-5076

1. Employee Safety Programs Booklet

This booklet is being provided to you for use while your employees are working at our facilities. Since many of your employees work in the same areas as university personnel, there is the same level of exposure for both groups.

REMINDER: IT IS THE RESPONSIBILITY OF ALL UNIVERSITY CONTRACTORS TO PROVIDE TO EHS A MATERIAL SAFETY DATA SHEET (MSDS) FOR ANY HAZARDOUS CHEMICAL UTILIZED AT THIS CAMPUS.

2. Campus Asbestos Containing Material (ACM) Locations

This list is intended to be a guidance document only. It is substantially complete. However, the purpose is to inform and alert personnel to known locations of ACM and thereby avoid accidental disturbance and reduce the potential for fiber release episodes.

It is your responsibility to review and discuss the information contained in these documents with all of your employees. Please keep a copy available on location for use by your employees. Should you have any questions or concerns, please contact the Department of Environmental Health and Safety (410-296-7593).

Please sign the bottom of the form and return a copy with the original signature to EHS.

I, the undersigned, acknowledge it is my responsibility to review the above information in its entirety; to familiarize myself and other company employees with the contents.

NAME (PRINT)	SIGNATURE	DATE
COMPANY	TITLE	

APPENDIX K

PROCUREMENT ADDENDUM TO TOWSON UNIVERSITY CONTRACTS (HAZARD COMMUNICATION SECTION)

11:03 HAZARD COMMUNICATION STANDARD

- A. The Contractor will be responsible for advising all of its employees of their rights under Towson's Hazard Communication Standard Program, or more commonly referred to as the Right To Know (RTK) Program. The University will supply the vendor with a reproducible copy of the TU Employee Safety Program (ESP) booklet, which outlines this program. The Contractor is responsible for distributing a copy of Towson's ESP booklet to its employees. The Contractor must provide written documentation to the Department of Environmental Health and Safety that each and every employee who physically works on campus has received a Towson ESP booklet and has been trained in his/her rights and responsibilities pursuant to the Program. The Owner, President or other most senior Company/Corporate Officer will sign and return written verification to EHS stating that he/she will adhere to the requirements specified above. The University's Department of Environmental Health and Safety is responsible for administering the University's RTK program and will handle all information regarding this program. Failure to adhere to the requirements of the RTK Program may result in implementation of punitive action such as the cancellation of the contract(s).
- B. Pursuant to the provisions of the RTK Program, the Contractor will be responsible for the following:
1. Submission to the Contract Services Office and EHS of the manufacturer's Material Safety Data Sheet (MSDS) for all chemicals or chemical products to be used or in use at the University. These MSDS must be delivered no later than two (2) weeks prior to the start of any work under this contract. There must be an MSDS for every product in use or present on the campus unless exempted in writing by EHS. MSDS's for any changes or additions to the complete campus chemical list must be submitted five (5) working days prior to the actual change occurring. All proposed changes must be approved in writing by EHS prior to the actual use of the new product on campus. The University, through EHS, reserves the right to order a change in the use, storage, or method of handling of any chemical/chemical product that it feels poses an unreasonable hazard to the University's community.

NOTE: In the absence of the original manufacturer's MSDS, EHS will accept a generic equivalent as long as a letter from the Contractor stating that the original is not available is attached.
 2. The Contractor must warrant in writing to Towson University's Contract Administrator in the Procurement Department that all employees have been trained and will continue to be trained in the proper and safe storage, handling, use and disposal of all chemicals/chemical products in use.
 3. The Contractor agrees to obey and follow all local, state, and federal regulations regarding the storage, handling, use and disposal of all chemicals/chemical products. The Contractor agrees to properly dispose of all regulated waste in accordance with all applicable regulations and to make available to University's Contract Administrator all records necessary to support such activity.

11:04 ASBESTOS

- A. The Contractor is responsible for training and equipping all personnel concerning work in an asbestos environment as applicable. They must be trained as prescribed by COMAR 26.11.21. All new employees must be trained within 30 days after the Contractor hires them. This is to be accomplished at no additional cost to this contract or the University. An initial report on all employees as to their asbestos training will be presented to the University's Contract Administrator within the first 90 days of the Contract and updated on a monthly basis. Thereafter, failure to comply with this requirement would place the Contractor in default status.