

# HAZARD COMMUNICATION

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SAFETY POLICY MANUAL - SECTION 3.0 - POLICY NO. HM 2.1



SAFETY DEPARTMENT | 6001 UNIVERSITY BOULEVARD MOON TOWNSHIP, PA 15108

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## I. PURPOSE:

This policy outlines Robert Morris University's compliance with the requirements of the Federal Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and assures that information related to the use, handling, and storage of hazardous chemicals is made available to all employees who may be affected by exposure to hazardous chemicals.

Robert Morris University, through the implementation of the policy, will continue to protect the safety and health of employees exposed to hazardous chemicals. Employees will be trained in the presence of and hazards associated with the chemicals to which they may be exposed, how to understand and apply labels, how to interpret safety data sheets (SDSs), and the protective measures that can be used to prevent exposure.

## II. SCOPE & APPLICABILITY

This policy applies to all Robert Morris University Employees who may use or be exposed to hazardous chemicals (solid, liquid, or gas) in the workplace. This policy has only limited application for laboratory employees who are covered by the University's "MChemical Hygiene Program". Also, consumer products in standard retail packages are exempt from the requirements of this procedure, if the product will be used in the same manner as normal consumer use and its use results in a duration and frequency of exposure that is not greater than exposures experienced by consumers.

## III. REFERENCES:

- A. OSHA 29 CFR 1910.1200; Hazard Communication Standard.
- B. Pennsylvania Worker and Community Right-to-Know Act.

## IV. DEFINITIONS:

- A. **Chemical:** Any element, chemical compound or mixture of elements and/or compounds.
- B. **Chemical Name:** The scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name which will clearly identify the chemical for the purpose of conducting a hazard evaluation.
- C. **Common Name:** Any designation or identification such as a plant common name, code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.

- D. **Container:** Any bag, barrel, bottle, box, can, cylinder, drum, vessel, storage tank, or the like that contains a hazardous chemical. Pipes or piping systems, and engines, fuel tanks, or other systems in a motorized vehicle are not considered containers.
- E. **Globally Harmonized System (GHS):** Adopted by OSHA to enhance the safety and health of workers through more effective communications on chemical hazards.
- F. **Hazardous Chemical:** Any chemical which presents a physical or health hazard.
- G. **Hazardous Warning:** Any words, pictures, symbols, or combinations thereof appear on a label or other appropriate form of warning which convey the hazard(s) of a chemical.
- H. **Health Hazard:** A chemical which is classified as posing one of the following hazardous effects: Acute toxicity (any route of exposure), skin corrosion or irritation, serious eye damage or eye irritation, respiratory or skin sensitization, germ cell mutagenicity, carcinogenicity, reproductive toxicity, specific target organ toxicity (single or repeated exposure), or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A t1910.1200 Health Hazard Criteria.
- G. **Immediate Use:** A hazardous chemical under the control of and used only by the person who transfers it from a labeled container and only for use within the work shift in which it was transferred.
- H. **Label:** Appropriate group of written, printed or graphic information, elements concerning a hazardous chemical that is affixed to printed on or attached to the immediate container or a hazardous chemical or to the outside packaging.
- I. **Physical Hazard:** means a chemical that is classified as posing one of the following hazardous effects: explosive, flammables (gases, aerosols, liquids, or solids) oxidizer (Liquids, solid or gas), self-reactive, pyrophoric (liquid or solid), self-heating, organic peroxide, corrosive to metal, gas under pressure, or in contact with water emits flammable gas.
- J. **Pictograph:** A composition that may include symbol plus other graphic elements, such as border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight pictograms are designated under this standard for application to a hazard category.
- M. **Safety Data Sheet (SDS):** Written or printed material concerning a hazardous chemical which is prepared in accordance with 29 CFR 1910.1200 paragraph (g).

## V. PROCEDURE:

### A. Hazardous Chemical Inventory:

1. Each department must maintain a current Inventory of each hazardous substance used or stored by that department. The inventory must be updated each time a hazardous substance is added or deleted from the inventory. Each department shall document their Inventory using the attached **Hazardous Chemical inventory Form** or an equivalent.
2. Departments shall provide a copy of their chemical inventory to the RMU Safety Services. Information from department inventories will be incorporated into the master inventory/chemical database for the university.

### B. Purchasing Procedure:

1. No hazardous chemical shall be purchased unless it has previously been approved (i.e., a current SOS for the product and manufacturer is contained in both the Departmental and Master files) for use by the Department Supervisor or Manager.
2. Purchasing of hazardous chemicals will require a SOS with the first shipment, which should be requested on the purchase order. The Department Manager will ensure that SDSs are received with product shipments and that updates are forwarded to product users and Safety Department.
3. Should a new manufacturer of a hazardous chemical be approved for use, but the SOS on file is from a different manufacturer, a copy of the new SOS must be acquired.
4. Any change or SOS update for an approved chemical product or substance received must be forwarded to all departments using the chemical and to the Safety Department for inclusion in chemical inventory and SOS file(s).

### C. Container Labeling:

#### 1. General

In the workplace, hazardous chemical containers must be labeled with the appropriate manufacturer's or distributor's label or a properly completed "Replacement Label" as Identified by #3 of this section, so long as the labeling information conforms to the labeling requirements of the standard.

The following are five (5) situations where labeling is not required, and/or alternative labeling may be used.

- a) Containers Labeled Under Other Federal Laws: Other Federal agencies such as the Department of Transportation (DOT) require labeling on the articles they regulate to inform users of ingredients and hazards. These items are exempt from any additional labeling requirements under the OSHA Hazard Communication

Standard. Some additional examples of articles not covered by these labeling requirements include food, drugs, beverages, and hazardous waste.

- b) Portable Containers: Portable Containers into which hazardous chemicals are transferred from are exempt from labeling requirements if the chemical is completely used within the work shift by the employee who performed the transfer.
- c) Laboratory: Laboratory chemicals shall be labeled in accordance with 29 CFR 1910.1450, Occupational Exposure to Hazardous Chemicals in Laboratories.
  - (1) Labels on incoming containers shall not be removed or defaced.
  - (2) Chemicals produced for another user outside the laboratory shall be labeled in accordance with the stand
- d) Stationary Containers, Vessels, Pipes, etc.: Signs or placards will be affixed to Individual stationary containers, vessels, pipes, etc. of hazardous chemicals. The Supervisor has the responsibility for properly Identifying such equipment.
  - (1) Employees shall be informed during the formal training program of all unlabeled pipes carrying Hazardous Chemicals.
- e) Existing Labels: Existing labels may become damaged or illegible over the useful life of the container and should be replaced as necessary.

## 2. Incoming Containers:

- a) In most cases, containers of chemicals will already be labeled by the manufacturer, supplier, or distributor to satisfy the OSHA Hazard Communication requirements. All hazardous chemical containers received from the manufacturer or distributor must be labeled with the following information:
  - 1. Product Identifier- generally, this is the name as identified on the SOS.
  - 2. Signal words- a single word used to indicate the level of severity of the hazard and alert the reader to a potential hazard on a label. The signal words used are "danger" and "warning". "Danger" is used for the more severe hazards, while "warning" is used for less severe hazards.
  - 3. Hazard statement- a statement assigned to a hazard class and category that describes the nature of the hazard(s) a chemical present.
  - 4. Pictogram- a symbol that conveys specific information about the dangers of a chemical. (Not a required element of a label until 12/1/2015.)
  - 5. Precautionary statement- one or more phrases that describe recommended measures to be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical or Improper storage or handling of a hazardous chemical.

6. Name, address and telephone number of Manufacturer or Distributor of the chemical.
- b) The product name found on the label shall be, In all cases, the same name as found on the relevant SOS for that product.
- c) Labels on incoming chemicals will not be removed or defaced unless they are immediately replaced with replacement labels containing all required information and are consistent with the associated SOS.
- d) For solid metal (ex: steel) the label may be transmitted at time of initial shipment, thus not needing any additional labels unless a change takes place.

3. **Replacement Labels:**

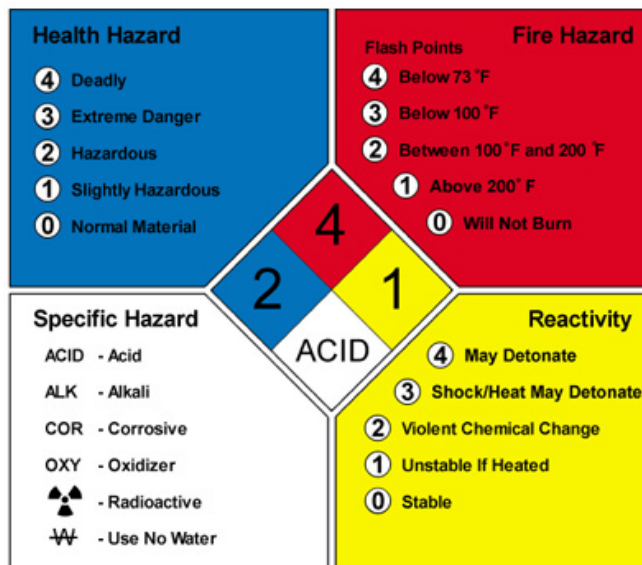
- a) A property completed replacement label provides all the required information as specified by the OSHA standard. Containers to which hazardous chemicals are transferred, must be labeled with the following information as a minimum:
  1. Identity of the hazardous chemical(s) within.
  2. Appropriate hazard warning(s) which will provide at least general information regarding the hazard(s) of the chemical (ex. Flammable, reactive, etc.).
- (a) One of the following systems may be used as a means of communicating the OSHA required hazard warning:
  - (i) Hazardous Material Identification System (HMIS) provides a 0-4 scale (0=low, 4=high) for health, flammability, and reactivity hazards. The “mode of entry” and “protective equipment” is depicted by a letter referring to a system of protective equipment. There are a number of variations of this type of labeling. An example of an HMIS label is provided below



(i) GHS pictogram labels are used to depict the recommended measures that should be taken to minimize or prevent adverse effects caused by exposure to hazardous products. The appropriate boxes on the label are checked depending on the hazards. An example of a GHS Pictogram label is provided below.



(ii) The NFPA labeling system uses a color code to distinguish the type of hazard and a numeric code to identify the hazard level for a health, fire, and reactivity hazard as follow.



**D. Safety Data Sheets (SDSs)**

1. Departments must maintain SDSs in an undamaged status and readily accessible to employees during each work shift. All employees who are expected to work with, and/or potentially be exposed to hazardous chemicals shall be trained and made aware of the location of the SDSs and of the information these sheets provide.
2. SDSs will be maintained within the Department for each chemical used by that Department. A master file of all SDSs will be maintained through Safety Services at [safety.rmu.edu](http://safety.rmu.edu).

**E. Chemical Storage**

1. Storage of hazardous chemicals should be limited to quantities necessary for routine activities.
2. Incompatible chemicals should be properly segregated.
3. Compressed gas cylinders must be properly secured and stored. (see [HM 2.7] compressed gas policy)
4. Bulk quantities should be stored in designated storage rooms or cabinets (ex. Bulk quantities of flammable materials should be stored in a flammable storage cabinet)

**F. Engineering and Administrative Controls**

1. Use volatile chemicals in well ventilated areas.
2. Use good housekeeping and personal hygiene. No eating, drinking or smoking in areas where hazardous materials are used. Always wash your hands or exposed areas after handling hazardous materials.

**G. Personal Protective Equipment**

1. The need for personal protective equipment (PPE) varies depending on the type of material being used. Where exposures to hazardous materials are not controlled through engineering or work practice controls, (PPE) may be necessary.
2. PPE including eye, face, respiratory, hand, body and foot protection shall be maintained and provided by the department in accordance with RMU's PPE Policy.

**VI. RESPONSIBILITIES:**

**A. Department Manager**

1. Ensure that all hazardous chemicals used by the Department are identified and inventoried. This inventory should be completed by providing all of the information that is requested on the attached "Chemical Inventory Form."



2. Identify all employees within the department who may be exposed to hazardous chemicals during routine and non-routine work activities.
3. Ensure that “Initial” and “Refresher” Hazard Communication Training is provided to all employees identified in #2 above. All staff members, including students and volunteers, are trained prior to working with hazardous chemicals. Refresher or subsequent training is provided when a new hazard is brought into the work area and as determined necessary.
4. Make available appropriate safety equipment and keep staff informed of the locations and use of such equipment. Control measures are implemented to protect employees from chemical hazards including work practices and personal protective equipment (PPE).
5. Ensure that the chemical inventory, safety data sheets, and the written Hazard Communications Program are made available to all Department employees.
6. 6.Ensure that containers of hazardous chemicals are labeled as noted in section V.C. of this policy.

**B. Department Employees**

1. All employees who use hazardous chemicals shall attend “Initial” and “Subsequent” Hazard Communication Training as determined necessary. Employees shall adhere to the procedures identified in this program and as presented during employee training.

**C. Purchasing**

1. Ensure that all requests for safety data sheets are made to the manufacturer or distributor of hazardous chemicals supplied to the University.

**D. Shipping & Receiving**

1. Collect and distribute safety data sheets from incoming shipments to the appropriate/requesting Department and Safety Department.

**E. Safety Services**

1. Provide technical support regarding the requirement of the OSHA standard and in the development of the Hazard Communication Program. This may include providing regulatory interpretation, evaluating adequacy of engineering controls and providing recommendation on personal protective equipment.
2. Assist in the development of training materials and/or training University personnel.
3. Assist departments with worker exposure monitoring and visual observations in areas where occupational exposure to hazardous chemicals in the workplace has been identified or where employees have expressed concern.

**VII. TRAINING & EDUCATION:**

- A. All employees who may be exposed to hazardous chemicals in the workplace or during non-routine activities are provided “Initial” Hazard Communication Training. Initial training covers the following as a minimum:
1. Content of the OSHA Hazard Communication Standard (29 CFR 1910.1200).
  2. The identification of operations or work activities in the employee’s work area which involve the use of chemicals that may pose a physical or health hazard to employees.
  3. The location and availability of the written Hazard Communication Program, including the chemical inventory and SDSs. A copy of the written program is maintained by each Department and is made available to employees upon request.
  4. The methods to detect the presence or release of hazardous chemicals in the workplace. Employees are informed of various detection methods including:
    - a) Continuous and/or periodic monitoring.
    - b) Visual appearance of specific chemicals when released.
    - c) Odors associated with specific hazardous chemicals.
    - d) The “physical” and “health” hazards associated with chemicals in the workplace.
  5. Methods of protection implemented or made available to protect employees from exposure to hazardous chemicals, such as:
    - a) Engineering controls
    - b) Work practices
    - c) Emergency procedures
    - d) Personal protective equipment
    - e) Details of the written Hazard Communication Program, including:
    - f) List (inventory) of hazardous chemicals found in the Department
    - g) The Container Labeling System
    - h) The availability and use of Safety Data Sheets
    - i) The availability of the written Hazard Communication Program – Available Upon Request
- B. “Subsequent” Hazard Communication Training is provided to affected employees when a new hazard is introduced into the work area, or as determined necessary.

C. Hazards of Non-Routine Tasks

1. Department Supervisors must inform employees in their work areas of any special tasks which may result in exposure to hazardous chemicals. In such instances, the Department Manager / Supervisor must ensure that the affected worker(s) are familiar with and know how to interpret and use the information on the chemical labels and corresponding material safety data sheet.

D. Informing Outside Contractors

1. It is the responsibility of the Department Manager / Supervisor to ensure that all contractors conducting services for that department provide proper notice and safety data sheets for all hazardous chemicals brought onto Robert Morris University premises. Receipt of this information should be closely coordinated with Safety Services. All SDSs brought on site will be temporarily maintained by the Department until the products are removed.
2. It is the responsibility of the Department to inform on-site contractors that empty or partially full containers of hazardous chemicals may not be left on Robert Morris University premises after demobilization. All hazardous chemicals brought on site by a contractor must be removed by the contractor upon departure.
3. It is also the responsibility of the Department for whom work is being conducted to advise each contractor working on Robert Morris University premises of the availability of information (labels, SDSs, and written program) pertaining to hazardous chemicals used by the University. Robert Morris University will provide information to outside contractors/vendors as necessary

VIII. **DOCUMENTATION & RECORD KEEPING:**

- A. This program is available for review by all employees covered by this standard and their representatives.
- B. This program is reviewed and updated as necessary, and at least every 3 years.
- C. All “hard copy” records relating to employee training will be maintained within the employee’s department.

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**Implementation Date:** June 2006

**Last Reviewed/Revised:** March 2022

### Hazardous Chemical inventory Form

Department Name:		Date:
Workplace (Buildings Name(s) Covered by this Inventory):		
Name of Person Completing this Inventory:		
Chemical Name	Manufacturer	Quantity (Lbs., Gal., etc..)