

<b>Calvin College Hazard Communication Program</b>		<b>Revision 2</b>	
Prepared by: Jennifer Ambrose	Date: 8/23/2010	Approved by: Cabinet	Date:

### 1.0 POLICY

The following hazard communication program has been established for Calvin College to maintain compliance with MIOSHA Part 92 and OSHA 29 CFR 1910.1200.

### 2.0 PURPOSE

The purpose of the policy is to communicate with employees the potential hazards of the chemicals at Calvin. This communication of hazards is to be accomplished through appropriate container labeling, material safety data sheets, education and training.

### 3.0 DEFINITIONS

**ACUTE:** Effects that occur rapidly as a result of short-term exposures, and are of short duration.

**CHRONIC:** Effects that are long-lasting and recurring

**COMBUSTIBLE LIQUID:** Any liquid having a flashpoint at or above 100°F (37.8° C), but below 200°F (93.3°C), except any mixture having components with flashpoints of 200°F (93.3°C), or higher, the total volume of which make up 99 percent or more of the total volume of the mixture.

**FLAMMABLE:** A chemical that gives off vapors which readily ignite under normal working conditions.

**FLASHPOINT:** The minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite.

**HEALTH HAZARD:** A chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes.

**MATERIAL SAFETY DATA SHEET (MSDS):** A Material Safety Data Sheet is a technical bulletin detailing health and safety information about hazardous substances. An MSDS tells employees about the hazards of substances used in their work locations and the safety precautions that should be taken when handling them.

**OXIDIZER:** A chemical other than a blasting agent or explosive that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.

**PHYSICAL HAZARD:** A chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, and organic peroxide, an oxidizer, pyrophoric, reactive, or water reactive.

**REACTIVE (UNSTABLE):** A chemical which in the pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or will become self reactive under conditions of shocks, pressure, or temperature.

### 4.0 RESPONSIBILITIES

- Environmental Health & Occupational Safety
  - Ensure initial training at time of hire
  - Conduct refresher training as needed

- Review the policy and procedure annually
- Assure that signs are posted throughout campus notifying employees of MSDS location in accordance with Act No. 80 of the Public Acts 1986
- Ensure posters identifying the person responsible for maintaining MSDSs and where the MSDSs are located are posted within each department.
- Ensure that new or revised MSDS are posted on the MIOSHA “New or Revised MSDS” signs
- Maintain a list of hazardous chemicals and ensure availability to all employees
- Department Representatives
  - Ensure containers entering the department are properly labeled (identity, hazard rating)
  - Maintain MSDS binders and ensure accessibility
  - For a detailed listing of Department Representatives, see Appendix A
- All Employees
  - Follow the policy and procedure
  - Any employee who orders a chemical shall request an MSDS be sent with the order from the supplier
  - Forward a copy of the MSDS to EHS for review
  - Ensure portable containers used in the work area are labeled with the appropriate identity and hazard warning
  - Do not remove or deface labels on containers unless immediately marked prominently and legibly with the appropriate information

## 5.0 PROCEDURE

- Requesting an MSDS
  - MSDSs will be available for review to all employees during each work shift. Copies will be available upon request to the Environmental Health and Safety Office (EH&S).
  - If a required MSDS is not received, the responsible person of the department shall contact the supplier, in writing, to request the MSDS. If an MSDS is not received after two such requests, the Environmental Health and Occupational Safety Office shall contact the MIOSHA Occupational Health Division (OHD) at (517) 322-1608, or General Industry Safety Division (GISD) at (517) 322-1831, for assistance in obtaining the MSDS.
- New Products and Archiving MSDS – See Appendix B
- Multi-Employer Worksites
  - If Calvin College exposes any employee of another employer to any hazardous chemicals that we produce, use, or store the following information will be supplied to that employer:
    - The hazardous chemicals they may encounter.
    - Measures their employees can take to control or eliminate exposure to the hazardous chemicals.
    - The container and pipe labeling system used on-site.
    - Where applicable MSDSs can be reviewed or obtained.
  - Periodically, our employees may potentially be exposed to hazardous chemicals brought on our site by another employer. When this occurs we will obtain from that employer information pertaining to the types of chemicals brought on-site, and measures that should be taken to control or eliminate exposure to the chemicals. The contractor will also indicate the area(s) that are intended for chemical use and the location(s) and method(s) of storage for the chemicals. The contractor is

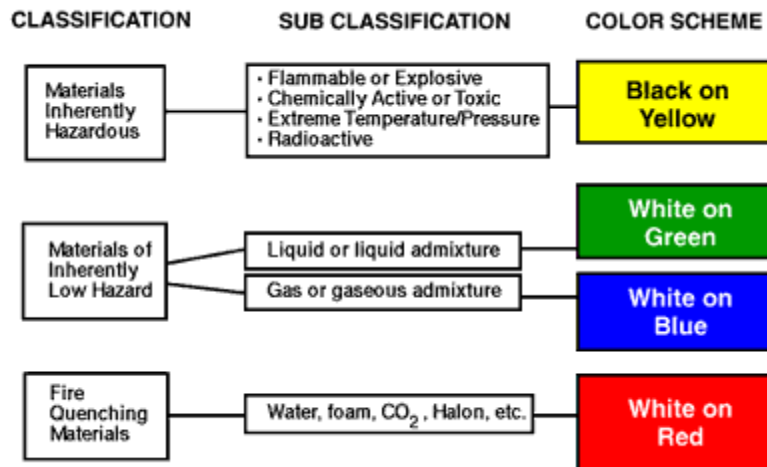
- responsible for the removal of all unused portions of the chemicals and their waste products.
- It is the responsibility of EH&S to ensure that such information is provided and/or obtained prior to any services being performed by the off-site employer. To ensure that this is done the following mechanism will be followed:
    1. Chemical Notification  
All chemical materials to be used on Calvin College property must first be approved by the Director of Physical Plant and/or Environmental Health and Safety Officer.
    2. Labeling  
All containers of hazardous materials brought onto Calvin College property by the Contractor shall be properly labeled. Similarly, where such hazardous materials are then transferred to a secondary container, a label shall be so affixed to the receiving container. All such labels shall include information that identifies the product, health and physical hazard warnings and provides safe handling instructions.
    3. Material Safety Data Sheets (MSDS)  
Material Safety Data Sheets containing required information on any and all hazardous materials used or produced by the Contractor on Calvin College property shall be in the possession of the Contractor at all times while on site, and made available upon request to affected Calvin College employees for their examination. Material Safety Data Sheets shall disclose information about the hazards, possible health effects and protective measures associated with the use of the hazardous material.
  - In accordance with the requirements of the MIOSHA Hazard Communication Standard, Calvin College maintains files of Material Safety Data Sheets (MSDS) on chemical substances in the facility. If a Contractor or its employees should have a question regarding any chemical they may come in contact with, an MSDS on that chemical should be reviewed. MSDS's can be obtained from the Environmental Health and Occupational Safety Officer upon request.
  - Hazardous Non-Routine Tasks
    - Occasionally, employees are required to perform non-routine tasks (i.e. enter confined spaces, etc.). Prior to starting work in such areas, each employee will be given information about the hazards of the area or procedure. This information will include:
      - Specific chemical hazards.
      - Protection/safety measures the employee can take to lessen risks of performing the task.
      - Measures the company has taken to eliminate or control the hazard, including:
        - air monitoring,
        - ventilation requirements,
        - use of respirators,
        - use of attendants to observe procedures, and
        - emergency procedures
    - It is the policy of Calvin that no employee will begin performance of a non-routine task without first receiving appropriate safety & health training.
    - It is the responsibility of the supervisor to ensure that the employee receives the necessary training prior to beginning the task. Assistance in evaluating hazards of non-routine tasks and determining the appropriate precautions and protective

measures is available through EH&S.

- Pipes and Piping Systems
  - Information on the hazardous contents of pipes and piping systems will be identified by label, sign, placard or written operating instructions.
  - Natural gas, steam and compressed air lines (with pressures exceeding 25 psig) will be identified in accordance with ANSI A13.1-198.
    - ANSI recommends the following colorations: blue for low-medium pressure oxygen and compressed air lines, yellow for variable-high pressure oxygen and compressed air lines, and yellow for acetylene and natural gas lines.
  - Calvin College will label pipes according to this ANSI standard in new construction and as buildings are remodeled. As work load permits existing pipes will be labeled accordingly.

## ANSI MARKING COLOR RECOMMENDATIONS

The color of the pipe marker is used to identify the hazard level of the pipe contents.



## 6.0 TRAINING

- The EH&S shall coordinate and maintain records of employee hazard communication training, including attendance rosters (when applicable).
- Before their initial work assignment, each new employee will complete a New Employee Phase 2 training module, which includes training on hazard communication. After each new employee completes the module he will meet with his supervisor and receive job specific hazard communication training. The combination of these two training resources will cover:
  - The requirements of the MIOSHA Hazard Communication Standard
  - All operations in the work area where hazardous chemicals are present
  - Location and availability of the written hazard communication program, the list of hazardous chemicals, and the MSDS
  - Methods and observations that can be used to detect the presence or

- release of hazardous chemicals in the work area
  - Physical and health hazards of the hazardous chemicals
  - Measures the employee should take to protect themselves from these hazards
  - Details of the hazard communication program including explanation of labeling system and MSDSs and how employees can obtain and use hazard information
- Before any new physical or health hazard is introduced into the workplace, each employee who may be exposed to the substance will be given information on the measures necessary to protect themselves from these hazards.

## 7.0 HISTORY

Revision	Date	Description
1	7/2/2009	Changed formatting and 1.0
2	8/23/2010	Updated MSDS contacts

## APPENDIX A

### MSDS DEPARTMENT CONTACTS

Department	Responsible Person	Building/Room #
Art Department	Betty Sanderson	Spoelhof 121
Audio Visual	Randy Neuwsma	Hiemenga Hall 223
Biology Department	Lori Keen	DeVries 2 <sup>nd</sup> floor hall near 203
Calvin Theatre Company - Costume Shop	Heather Brown	FAC129
Calvin Theatre Company - Scene Shop	Christian Poquette	Chapel 182A Scene Shop
Campus Safety	Dan Gordon	Hallway near restrooms
Chemical Engineering	Aubrey Sykes	SB046

Chemistry Department	Rich Huisman	DeVries 3 <sup>rd</sup> floor East hall near 345
Communications Arts and Sciences	Judy VanderWoude	DeVos hallway 205
Conferences and Campus Events	Doug Huizenga	Spoelhof 207
EH&S and all Fire Extinguishers	Jennifer Ambrose	Hallway to Grounds
Electronics Shop	Chuck Holwerda	SB063
Geology, Geography and Environmental Studies		Basement level North Hall hallway
Health Services	Barb Mustert	Center clinical area, Room 170
Heritage Hall	Hendrina Van Spronsen	Library 243
HPERDS - Equipment Room	Dick Wilkins	HC 107
HPERDS - Training Room	Jenny Toonstra	VN 137
Information Technology	Michael Haan	Library CIT - in hallway behind front desk (on the way toward Helpdesk)
Library	Glenn Remelts	Library 3rd floor work room west wall
Nursing	Shelly Bartels	SB216 nursing storage room
Physical Plant - Carpet	Tom Oosterhouse	Service Building Carpet layout area
Physical Plant - Custodial	Ada Castle	Commons Custodial office
Physical Plant - Custodial	Ada Castle	DeVos 050B Custodial Office
Physical Plant - Custodial	Ada Castle	FAC Custodial Office
Physical Plant - Custodial	Ada Castle	Library 221 Custodial Office
Physical Plant - Custodial	Ada Castle	Noordewier Vanderwerp Custodial Office
Physical Plant - Custodial	Ada Castle	SF 103 Custodial Office
Physical Plant - Custodial	Ada Castle	SB085 Custodial Office

Physical Plant - Custodial	Ada Castle	Schultze Eldersveld Custodial Office
Physical Plant - Custodial	Ada Castle	Service Building Cleaning Supplies Room
Physical Plant - Custodial	Ada Castle	Spoelhof 236 Loading dock area outside of Custodial Office
Physical Plant - Custodial	Ada Castle	Zeta Lambda Custodial Office
Physical Plant - Grounds	Geoff VanBerkel	Service Building Grounds garage
Physical Plant - Mechanical	Larry VanHoe	Service Building Mech. Maint. Offices room
Physical Plant - Paint Shop	Burt Houseman	Service Building Paint Shop
Physical Plant - Transportation	Doug Kok	Service Building Transportation
Physical Plant - Woodworking Shop	Keith VanKooten	Service Building Woodworking Shop
Physics and Astronomy	Steve Platt	SB034
Printing Services	Dave Micele	Mail Print – Printing Services
Science Division Shops	Phil Jaspers	Engineering 120
Science Education	Jim Jadrich	SB237A
Ladies Literary Club	Ada Castle	Kitchen closet
Glen Oaks Apartments	Jay Lindeman	Maintenance Shop
Weyhill Building	Jodi Roossien	Maintenance Shop

## APPENDIX B

### Standard Operating Procedure (SOP) for Material Safety Data Sheet (MSDS)

**Scope:** This SOP has been developed for any Calvin College personnel or on-site contractor who will be involved in ordering and receiving products that come with MSDS's. This process should be followed according to the SOP and result in an efficient manner for cataloging by department. All department hazard communications representatives, as well as, the EH&S officer must oversee and assist in the process. The SOP is as follows:

**When ordering a new product, request that the vendor include the MSDS with the order.**

- 1.0 When receiving any new product from a vendor, locate and remove new MSDS from contents.
  - 1.1 The time span of use for each product needs to be recorded.  
Date stamp the MSDS with the date of arrival at Calvin College.
- 2.0 Cross-reference the revision date on the MSDS (located on front page) with the current revision date listed on the "Department Chemical Inventory List", located in MSDS catalog.
- 3.0 If both dates are the same, discard the new duplicate MSDS.
- 4.0 If the MSDS is for a new product or has a new revision date for an existing product, the following must happen:
  - 4.1 Make a copy of the new or newly revised MSDS and send to the Environmental, Health & Safety (EH&S) Officer. Indicate what department (e.g. Art Department) the MSDS is coming from.
  - 4.2 Insert the new or newly revised MSDS into the department MSDS catalog. Reference the chemical inventory list for proper placement into the catalog (i.e., alphabetical order by product name).
  - 4.3 Update the chemical inventory list (catalog spreadsheet) to reflect the new MSDS addition.
  - 4.4 List the new product or newly revised product on the MIOSHA posting. (Post a copy of the new MSDS at or on the appropriate MIOSHA posting center for each department, if desired). Consult department hazard communications representatives for posting location
  - 4.5 The listing and posting must occur within five days of receipt and stay posted for ten days.
- 5.0 Mail old MSDS to the EH&S officer for archiving. For products that are no longer used at Calvin College, record this by date stamping the MSDS before mailing it to the EH&S officer.
- 6.0 It will be the responsibility of the department hazard communications representatives or department director or chairperson to manage the MSDS maintenance catalog and chemical inventory list.
- 7.0 The EH&S officer will periodically inspect the department catalog's for current content and organization. If any problems arise, the EH&S officer should be contacted.
- 8.0 Master copies of MSDS catalog's for each department will be kept by the EH&S officer. All master copies should match department copies.