

EASTERN MICHIGAN UNIVERSITY™

# **Safety Policy and Procedures Program**



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**EASTERN MICHIGAN UNIVERSITY  
SAFETY POLICY AND PROCEDURES PROGRAM**

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# **EASTERN MICHIGAN UNIVERSITY SAFETY POLICY AND PROCEDURES**

## **PURPOSE**

To identify the safety rules and regulations of Eastern Michigan University.

## **SCOPE**

All divisions and departments are required to comply with Eastern Michigan University's safety policy and procedures. This policy and procedures applies to all employees including faculty, staff, full and part time employees, temporary employees, administrative personnel, graduate assistants, work study students, and student workers. Employees responsible for students in classes shall enforce this policy.

## **POLICY**

Eastern Michigan University shall maintain a clean and safe workplace and University employees are required to conduct their business in a safe and efficient manner.

This policy includes the issuance of multiple items of safety equipment to Eastern Michigan University employees for their individual use. The University supplies guards and other safety equipment for machinery in an ongoing quest to maintain a safe workplace.

As management of Eastern Michigan University, we accept the responsibilities to make the safety of human beings and prevention of property damage as well as environmental damage our primary concerns. We shall attempt to reduce the possibility of accidents and our safety procedures shall take precedence over expediting of projects and/or short cuts.

This policy includes the instruction of each employee in the objectives of standard operating procedures, hazards, safeguards, and the rules and regulations governing our safety program.

Further, Eastern Michigan University shall comply with all applicable federal, state and local safety rules, regulations and ordinances.

Eastern Michigan University's policy also includes disciplinary action for violation of any of the safety rules.

## **RESPONSIBILITIES**

### **President**

- Ensure provisions for health and safety compliance are afforded to all University employees.

### **Vice Presidents**

- Ensure all personnel in their divisions receive the necessary safety training and required safety equipment.

### **Deans, Directors, and Department Heads**

- Provide a healthy and safe work environment.
- Ensure compliance with all health and safety rules, regulations, and policies.
- Encourage health and safety suggestions from supervisors and employees.
- Include health and safety compliance in supervisor evaluations.

### **Supervisors**

- Train new employees on how to do their job safely.
- Retrain employees whenever a new hazard is presented, when employees demonstrate a lack of knowledge and annually as required by rules and regulations.
- Conduct and document safety inspections of equipment, machinery, and property.
- Enforce all University Safety Programs.
- Ensure employees follow the health and safety rules.
- Ensure employees are not exposed to health and safety hazards by eliminating hazards through engineering controls, workplace practices, use of personal protection equipment, and employee training.
- Document safety training.

- Act promptly when unsafe acts and/or conditions are observed or reported.
- Investigate and document all accidents and near misses. Report them to Risk Management.
- Contact the Health and Safety Office for assistance with health and safety concerns.
- Include health and safety compliance in employee evaluations.
- Hold periodic safety meetings; include safety information in staff meetings. Document all meetings.
- Participate in safety meetings on committee level.
- Establish and document preventive maintenance schedules.
- Understand job processes completely.
- Set a “POSITIVE” example for safety.

### **Employees**

- Comply with the health and safety rules and wear required personal protective equipment.
- Report unsafe conditions, equipment, work areas, and work practices promptly to the supervisor.
- Offer suggestions for accident prevention and recommend safety improvements to supervisors and the Health and Safety Committee.
- Provide input on safety policies and procedures and assist with their implementation.
- Serve on safety committees.
- Participate in building safety surveys with the Health and Safety Office and other designated personnel.

### **Health and Safety Office**

- Is the liaison with local, state, and federal health and safety agencies.
- Coordinates safety programs.

- Conducts campus safety inspections, including building safety surveys with employees and other designated personnel.
- Provides and distributes safety materials, including safety standards.
- Promotes and provides safety education.
- Conducts Safety Awareness and Hazard Communication training for all employees.
- Maintains the University's safety training data base and distributes the information accordingly.
- Chairs the University's Health and Safety Committee.
- Investigates and reports on accidents, safety complaints, and health concerns.

### **Risk Management**

- Ensures completion of accident records.
- Analyzes accident records and addresses increasing trends.
- Maintains required MIOSHA 300 log documentation.
- Protects the University's human and physical assets against accidental losses.
- Coordinates the Return-To-Work Program.
- Provides ergonomic analyses of workstations.
- Participates on the University Health and Safety Committee.

### **Physical Plant - Engineering**

- Ensures health and safety items are a priority in new buildings, renovation plans, and designs.
- Improves illumination, ventilation, or sound levels as needed.
- Guards machinery using approved safety devices and improved machinery layout.
- Improves storage practices.

### **Physical Plant - Maintenance**

- Discovers and repairs conditions in building mechanical equipment and systems which, if uncorrected, may cause accidents.
- Provides long-term care of buildings and equipment by adjustments, cleaning, inspections, and repair.
- Maintains records of preventive maintenance efforts.

### **Purchasing**

- Ensures equipment purchases comply with safety standards.
- Ensures appropriate safety devices are procured.
- Purchases less toxic and/or less flammable or reactive products.
- Ensures safety compliance requirements are included in projects using outside contractors.

### **Departments Hiring Outside Contractors**

- Advise outside contractors of Eastern Michigan University's safety policies and procedures.
- Require outside contractors to provide Material Safety Data Sheets for products brought onto University property.
- Require outside contractors to comply with all federal, state, and local health and safety regulations.

## **RESOLVING HEALTH AND SAFETY CONCERNS**

The Michigan Occupational Safety and Health Act (MIOSHA) Act No. 154 provides job safety and health protection for Michigan employees through the maintenance of safe and healthy working conditions. This Act enables employees and employee representatives who believe that an unsafe or unhealthy condition exists in their workplace to request an inspection by the Department of Labor and Economic Growth. Prior to contacting the Michigan Department of Labor and Economic Growth, Eastern Michigan University employees should attempt to resolve the health and/or safety concern through the established policies listed below.

### **Employees**

If the concern is within the employee's job responsibilities to correct, they should correct the situation and report the correction to their supervisor.

If the concern is not within the employee's job responsibilities to correct, they should immediately report the situation to their supervisor. For some bargained-for employees, safety concerns should be reported according to their bargaining contract. Safety concerns can also be reported to your Health and Safety Committee representative or directly to the Health and Safety Office.

If a health and safety concern is not addressed in a timely fashion by the supervisor or union representative, contact the Health and Safety Office at 7-0794.

### **Supervisors**

If the concern is within the supervisor's responsibilities to correct, he or she should correct the situation immediately.

If the concern is not within the supervisor's responsibilities to correct, the supervisor should report the concern, preferably in writing, to the dean, director, department head, and/or vice president for his or her department. The Health and Safety Director should be copied on the report.

For safety issues which do not fall under the supervisor's or department's jurisdiction, the Health and Safety Office should be contacted to investigate the situation. The Health and Safety Office will make recommendations accordingly.

## **Deans, Directors, Department Heads and Vice Presidents**

All health and safety concerns shall be responded to in a timely fashion. Employees and supervisors shall be apprised of corrective actions being taken to address health and safety concerns.

The Health and Safety Office shall be contacted by the dean, director, department head and/or vice president whenever guidance regarding health and safety is needed.

Prior to installation of new equipment or renovation of a space, the Health and Safety Office should be contacted to review the proposed changes for health and safety issues.

## **Health and Safety Office**

The Health and Safety Office shall respond to reported health and safety concerns. In addition, building health and safety audits shall be conducted and the appropriate departments notified of necessary actions to correct health and safety violations.

The Health and Safety Office shall be the liaison with federal, state and local health and safety inspectors.

New equipment and renovation projects shall be reviewed for potential health and safety issues and recommendations made accordingly to minimize the creation of new health and safety issues.

## **Students**

In teaching laboratories, students should report health and safety concerns to the graduate teaching assistant or the instructor.

Safety concerns regarding a particular class should be addressed to the class instructor or the department head.

General concerns should be reported to your advisor, the department head of the area where the problem is occurring and/or the Health and Safety Office.

## **Building Administrators**

Shall respond to building safety complaints in a timely fashion, notifying the appropriate departments of the need for corrective actions.

## COMMUNICATIONS

### EMERGENCY PHONE NUMBERS:

Fire Department.....	911
Police Department.....	911 / 7-1222
EMS.....	911
Health and Safety Office.....	7-0794
Risk Management.....	7-1357
University Health Services.....	7-1122
Physical Plant.....	7-3380
Radiation Safety Officer.....	7-0086/7-0106

Emergency phone numbers should be posted by telephones. Departments should provide the Department of Public Safety with a list of emergency contact phone numbers. Departmental postings should include the location, within the department, of the emergency phone contact list.

Evacuation routes/plans are to be posted in all campus buildings. It is each department's responsibility to designate an evacuation location/meeting place outside the building for all emergencies requiring evacuation. See Chapter 7 of the Emergency Response Plan (ERP) for additional evacuation information.

In an emergency situation where evacuation is necessary, evacuation of Eastern Michigan University's premises shall be made under direction of the Department of Public Safety and/or a senior Ypsilanti Fire Department official.

Supervisors are responsible for knowing how many employees are in their work area and accounting for all the employees at the designated evacuation location.

## **FIRE SAFETY**

Eastern Michigan University will rely on the local area fire departments to handle all fire related emergencies.

Employees shall be trained on the evacuation routes from their buildings and on the location of fire pull stations.

Employees shall be trained to pull the fire alarm, evacuate the area and call 911 from an isolated area.

Everyone (employees, students, visitors, etc) is required to exit buildings whenever a fire alarm is sounded, unless prior notification of testing has been provided.

Employees, when leaving a fire area, shall close doors along the way whenever possible.

Supervisors are responsible for assembly of their staff in designated locations during a fire related evacuation.

Employees shall know the location of fire extinguishers, however, shall only use them if trained\* on their use.

Fire extinguishers and pull stations shall be readily accessible and not blocked by equipment or stored items.

Employees working in areas with special extinguishing systems (e.g., Halon) shall be trained on their use and the procedures to follow when they are discharged.

Fire doors shall be kept closed at all times. Propping of fire doors is prohibited.

Employees shall be trained\* to "Stop, Drop, and Roll" in the event of clothing catching on fire.

An eighteen (18) inch clearance shall be maintained below all sprinkler heads.

Please refer to Chapter 10 of the Emergency Response Plan (ERP) for additional fire safety information.

\* Training is available at the University. Please contact the Health and Safety Office (7-0794) to schedule fire safety training.

## **EXTREME WEATHER EMERGENCIES, NATURAL DISASTERS AND OTHER EMERGENCIES**

In cases of extreme weather conditions, the campus Emergency Team (E-Team) will make the decision for any modification of class schedules and/or work schedules.

Any alteration of class/work schedules will immediately be conveyed to University Communications and the Department of Public Safety.

Information regarding any closings will be carried on the EMU Newline (734.487.2460); the switchboard (734.487.1849); WEMU (89.1 FM); WJR (760 AM); WWJ (950 AM) WAAM (1600 AM), and [www.emich.edu/univcomm/weatherpolicy.html](http://www.emich.edu/univcomm/weatherpolicy.html) as well as other radio and television stations.

### **1. Weather Conditions:**

#### **Thunderstorms (lightning)**

Thunderstorms generally occur during the warm months. More people are seriously or fatally injured by lightning from thunderstorms than by any other weather condition. Remain inside buildings and do not touch electrical appliances, water faucets, or telephones. Electrical energy from a lightning strike can be carried inside on wires and pipes. If you are in an open area, kneel down and place your hands on your knees. Stay away from single trees or poles since lightning generally strikes the highest object. In a group of trees, stay in the middle.

#### **Snowfall and Ice**

Michigan occasionally has heavy snowfall or ice conditions affecting University operations. The Physical Plant is responsible for snow and ice removal. The Department of Public Safety shall contact Physical Plant staff for early arrival when necessary

#### **Tornados**

- The Eastern Michigan University campus has three tornado warning sirens. The sirens are tested monthly from March through September on the first Saturday of the month at noon. During an actual warning, the sirens are sounded. Do not assume because the siren is no longer sounding the warning has been canceled. Tune into WEMU for weather updates and all-clear information.
- Stay in the building, do not evacuate.
- If a tornado warning is in effect, whenever possible, go to an interior hallway on the lowest floor in the building.
- Take immediate shelter under tables, desks, doorways, and similar places.

- Keep away from overhead fixtures, windows, filing cabinets, bookcases, and electrical power equipment.
- Assist disabled persons, locating a safe place for them.

## **2. Natural Disasters - Earthquakes, Floods, etc.**

If the Department of Public Safety or another designated official orders evacuation:

- Evacuate as instructed by emergency personnel.
- Assist disabled persons.
- Beware of falling debris or electrical wires as you exit.
- Proceed to evacuation area.
- Take precautions against aftershocks.
- Follow all emergency instructions.

## **3. Other Emergencies**

### **Chemical Spills**

- Evacuate the area and warn others to stay away from the spill area.
- Call 911 from outside the spill area.
- Report the exact location, material spilled (if known), and quantity spilled.
- Do not attempt to rescue someone unless you know what was spilled and how to properly protect yourself from the hazard.
- Only properly trained and protected individuals should clean up spills.
- For chemical splashes to eyes and skin, immediately flush the eye's and/or skin for at least fifteen (15) minutes. Remove contaminated clothing. Seek medical attention immediately.
- For incidental spills follows procedures outlined in your departments standard operating procedures. If the appropriate training, protective equipment, or spills clean up materials are not available, leave the area and call 911.
- Properly dispose of all chemicals and materials used for chemical spill cleanup.

## **Radioactive Material Spills**

- Remain calm.
- Attend to injuries and emergencies first. These take precedence over radioactive contamination.
- Alert others of the spill. Call 911 for assistance.
- Wear appropriate personal protective equipment to isolate and contain the spill. Do not spread radioactive contamination beyond the immediate area and do not allow others to enter the contaminated area.
- Monitor all parties involved with the spill, the spill area and the surrounding area.
- Clean up spills using paper towels and absorbent pads. All materials used for spill clean up must be disposed of according to radioactive waste disposal procedures.

## **Biological Spills**

- Alert others of the spill.
- Use appropriate personal protective equipment (gloves, goggles, etc.).
- Cover the spill with paper towel; pour disinfectant (1:10 bleach dilution) around the edges of the spill working into the spill. Do not create splashes. Allow contact for 20 minutes.
- Clean up the paper towels and rinse the area. Dispose of all contaminated waste as a biohazard.

Please see Chapter 11 of the Emergency Response Plan (ERP) for additional information regarding spills.

## **EMPLOYEE INJURY/ILLNESS & MEDICAL EMERGENCIES**

Work related injuries and illnesses should be checked by staff at MWorks. MWorks is located at University of Michigan Hospital at 1500 East Medical Center Drive, Room UHB1 A244 Ann Arbor, MI 48109, and Phone No. 734.998.8788. Hours: Monday through Friday 7 a.m. to 5 p.m. After hours/weekends/holidays, go to the University of Michigan Hospital Urgent Care Clinic/Emergency Department.

If time permits, notify or have someone notify Risk Management (7-1357) of the situation and where the employee is being sent for medical care. All work related injuries must be reported to your supervisor. Both the employee and the supervisor must fill out the Employee Injury Report Form and send it to the Office of Risk Management and Workers' Compensation, 11 Welch Hall. The Employee Injury Report Form can be found in Appendix 1.

If the illness/injury is due to a chemical exposure, have someone other than the victim obtain an MSDS on the suspected chemical(s) and provide this to the medical facility at the time of treatment.

For major injuries or heart attack, call 911. Stay with the victim. If needed, you may begin CPR only if you are currently trained and certified, however you are not required to render aid to the victim. If you start CPR, you must continue care, up to your level of training and stay with the victim until advanced medical help arrives. It is recommended that each department have staff trained to perform CPR. Classes are available through University Health Services. Call 487-1122.

For electrical shock call 911. Do not go near the victim until you have verified that the power source has been turned off. You may give CPR only if needed and you are properly trained and certified.

For additional information regarding employee injury/illness/medical emergencies, see Chapter 12 of the Emergency Response Plan (ERP).

## UTILITY FAILURES

In the event of a power failure:

1. Between 8:00 A.M. and 5:00 P.M., notify Maintenance Operations at 7-3380 or deliver a message to Physical Plant, located on Ann Street. Phones in the outage area may not operate.
2. After hours, notify the Department Public Safety, 7-1222, or deliver a message to the Public Safety Office, located within the Parking Structure.
3. If evacuation of the building is required, assist disabled persons to designated areas.
4. Staff in laboratories, machine shops and/or offices should secure experiments, activities, and equipment that may present a hazard if electrical power is off or if a hazard may be created by the return of power.
5. Turn off all electrical equipment and appliances (leave lights on).
6. If emergency lighting is not operational, note the location of the fixture and report it to the Physical Plant after the power has been restored.

In the event of a gas line rupture, steam leak or a major water line failure, contact the Department of Public Safety at 911 immediately.

Contact the Physical Plant to report other system failures.

Please see Chapter 14 of the Emergency Response Plan (ERP) for additional information on utility failures.

## **LOSS PREVENTION**

The department of Risk Management and Workers' Compensation provides the University with a loss prevention program to evaluate the University's various risks.

General loss control inspections are conducted on a semiannual basis and property loss control inspections are conducted on an annual basis. Reports assessing the risks are issued so that the University may respond.

## **CHEMICAL HAZARD COMMUNICATION**

The Hazard Communication program was established to provide employees with information regarding the chemicals in their work environment.

### **Determination**

The department ordering the chemical shall rely on Material Safety Data Sheets (MSDS) from the suppliers to determine the degree of hazard.

### **Labels**

Original container labels should contain the following information:

- Identity of material
- Hazard level
- Name and address of responsible supplier-contact.

Secondary containers of chemicals used within the University must be labeled as to their identity and hazard.

### **MSDS**

Supervisors shall ensure copies of MSDSs are maintained and the MSDS location poster is prominently displayed. MSDSs will be located within the department of use and a copy maintained in the Health and Safety Office. MSDSs must be available for review by all employees and other concerned parties. An example MSDS can be found in Appendix 2.

### **Training**

All employees at the University must attend a session of the Safety Awareness and Hazard Communication training program provided by the Health and Safety Office. Hazard Communication training information can be found in Appendix 3. Departments must provide specific training on the hazardous chemicals present in their work area.

Before the introduction of any new chemical considered “hazardous” into the workplace, each affected employee will be given training regarding the chemical, associated hazards and proper use, handling and disposal. The chemical will also be added to the department’s chemical inventory.

Employees working in laboratories must receive Laboratory Safety training prior to working in the laboratory with chemicals.

For additional information regarding chemicals, please see the Eastern Michigan University Hazard Communication program, the EMU Chemical Hygiene Plan (CHP) or contact the Health and Safety Office at 7-0794.

## LOCKOUT/TAGOUT

The purpose of the Lockout/Tagout program is to ensure employees are protected from unintended mechanical and/or electrical motion or unintended release of energy which could cause injury or death when they set up, adjust, repair, service, install or perform maintenance work on equipment, machinery or processes. Lockout/Tagout procedures apply to all employees performing any of the aforementioned tasks.

- The power source of any equipment, machine or process to be set up, adjusted, repaired, installed or where maintenance work is to be performed and unintended motion or release of energy would cause personal injury or death, shall be locked out by each employee doing the work. Sources of energy, such as springs, air, hydraulic fluid and steam, shall be evaluated in advance to determine whether to retain or relieve the fluid pressure prior to starting work.
- Safety locks are for the personal protection of the employee and are only to be used for locking-out equipment.
- Safety locks, adaptors and “DANGER” tags can be obtained from the supervisor.
- Equipment locks and adaptors can be obtained in the departmental supervisor’s office. The sole purpose of the “equipment” lock and adaptor is to protect the equipment during periods of time when work has been suspended or interrupted. The equipment locks are **not** to be used as a substitute for the employee’s personal safety lock.
- Safety locks shall contain a brass (or other suitable material) tag with the employee’s name and department stamped on it.
- One key of every lock issued shall be retained by the employee to whom it was assigned. The only other key to the lock shall be retained by the key controller in the main office.
- Employees shall request assistance from their supervisors if they do not know where or how to lock-out equipment.
- Any questions regarding lockout procedures should be directed to the supervisor.

For additional information regarding Lockout/Tagout procedures, see the Eastern Michigan University Lockout/Tagout Program or contact the Health and Safety Office at 7-0794.

## CONFINED SPACE ENTRY

The purpose of the Confined Space Entry program is to ensure employees entering into confined spaces or permit-required confined spaces are properly trained and provided with the appropriate equipment to enter the space and perform their work safely. MIOSHA defines a confined space as any space that meets all the following criteria:

- is large enough and so configured that an employee can bodily enter and perform assigned work;
- has limited or restricted means for entry or exit ( e.g., bins, tunnels, hoppers, silos, tanks, vaults, pits, etc.); and
- is not designed for continuous employee occupancy.

A “permit-required” confined space is defined by MIOSHA as any confined space that has one or of the following characteristics:

- contains or has a potential to contain a hazardous atmosphere (e.g. oxygen deficit or enriched, flammable and/or toxic);
- contains materials that have the potential for engulfing an entrant (e.g., sand, grain, liquid, etc.)
- has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls, or by a floor that slopes downward and tapers to a smaller cross section; or
- contains any other recognized serious safety or health hazard.

Confined spaces and permit-required confined space must be identified and posted with signs. Permit-required confined spaces are labeled as follows:

**DANGER  
PERMIT-REQUIRED CONFINED SPACE  
DO NOT ENTER WITHOUT AUTHORIZATION**

OR

**DANGER  
PERMIT-REQUIRED CONFINED SPACE  
AUTHORIZED PERSONNEL ONLY**

Non-permit-required spaces are labeled as follows:

**DANGER  
CONFINED SPACE  
AUTHORIZED PERSONNEL ONLY**

OR

**DANGER  
CONFINED SPACE  
KEEP OUT  
UNLESS AUTHORIZED**

When labeling of a confined space is not practical, it is not necessary to affix a label to the opening of the space (e.g., manhole covers, etc.). Confined spaces not identified with labels/signs include: sanitary and storm sewers; some sanitary/storm sumps; crawl spaces/pipechase access points in public areas (e.g., stairwells, classrooms, mechanical room doorways, attic accesses, etc.); air plenums above ceilings; exterior window wells and air intake wells, exterior (e.g. manholes) access points to utility tunnels and other spaces in which it is impractical to affix labels to the point of entry (specifically floor hoist pits, and hot surfaces such as boilers and exhaust stacks).

Only employees with proper training and monitoring equipment may enter into a confined space. For additional information regarding confined space entry, please refer to Eastern Michigan University's Confined Space Entry Program or contact the Health and Safety Office (7-0794).

## PERSONAL PROTECTIVE EQUIPMENT

Eastern Michigan University's departments provide the following personal protective equipment, as needed:

Aprons, Lab Coats	Respirators/Dust Masks
Ear Muffs	Harnesses, and Lifelines
Ear Plugs	Safety Glasses
Face Shields	Safety Goggles
Gloves	Safety Shoes
Hard Hats	Toe Protectors

Prior to using any of the above safety equipment, a workplace assessment must be conducted and documented by the issuing department. Employees must be trained on the proper use, maintenance and limitations of all safety equipment. Workplace Assessment Forms are available from the Health and Safety Office.

Each of the above items is required at specific locations at various times. Some items are required equipment for all employees and visitors in shop areas and laboratories, such as safety glasses.

The personal protective equipment provided must comply with safety standard requirements.

### **Safety Shoes**

Each employee will wear suitable work shoes. Sneakers,\* sandals or woven shoes are not permitted for work conducted in the following areas:

Groundskeeping Operations

Laboratories

Machine Shops

Mechanical Rooms

Physical Plant Workshops

Others as Identified

Steel toe, reinforced shoes are required in some of the above areas and shall be provided accordingly.

\*Where applicable, steel toe sneakers meeting OSHA specifications are permitted.

## HOUSEKEEPING

A clean, uncluttered workplace is necessary to ensure safe operations at Eastern Michigan University. At the beginning of a work shift, each employee should quickly observe his or her work site for debris or any other material detracting from an orderly workplace. The employee should remove, contain or isolate any safety hazards and report the hazard to their supervisor.

### **Operation**

During daily operations, each employee will perform his or her work in such a manner to not detract from good housekeeping at his or her work site. Any abnormal conditions the employee cannot correct should be referred to the supervisor. At the end of the work shift, the work site shall be left neat and orderly.

### **Spills**

Spills of hazardous materials should only be clean by trained individuals. Please reference the section on "Other Emergencies" on page 11 for additional information on hazardous materials spills.

Each spill must be contained and cleaned as quickly as possible to maintain a safe work environment. Liquid spills increase the potential of falls due to slippery footing. Hazardous material spills shall only be cleaned by appropriately trained individuals. Waste materials generated from a chemical, radiological or biological spill cleanup must be disposed of as a hazardous waste. Contact the Health and Safety Office for assistance with the hazardous waste disposal.

If a hazardous material spill occurs and the storm or sanitary drainage system becomes contaminated, notify the Health and Safety Office at 7-0794 (after hours and weekends and holidays, call 7-1222) and the proper authorities will be notified.

## HAZARDOUS MATERIALS DISPOSAL

Generators of hazardous waste are required to comply with federal, state and local rules and regulations regarding hazardous materials disposal. These include the Resource Conservation and Recovery Act (RCRA) which requires a “cradle to grave” accounting system for hazardous wastes; the Department of Transportation (DOT) which requires proper identification, labeling and packaging of hazardous wastes and Michigan Act 64 which regulates generators, haulers and facilities handling hazardous wastes through licensing and inspections.

Eastern Michigan University is required to comply with all hazardous wastes disposal regulations. Hazardous chemicals, radiological and biological wastes cannot be disposed of as normal trash or poured down the drain. The Health and Safety Office coordinates hazardous chemical and biological waste disposals. If you are not sure how to dispose of a hazardous material, if you have hazardous waste for disposal or if you have any questions regarding hazardous waste disposal, please contact the Health and Safety Office at 7-0794 for assistance.

Universal wastes are specific hazardous waste streams that when recycled are exempted from some of the hazardous waste regulations. At Eastern Michigan University, the following waste streams are treated as universal wastes:

**Batteries-** all types.

**Electrical Lamps-** including fluorescent, high intensity discharge, sodium vapor, mercury vapor, neon and incandescent lamps.

**Electrical Equipment-** including computers, televisions, microwaves, etc.

**Pesticides-** including certain suspended, canceled or unused pesticides.

**Devices containing elemental mercury-** including thermostats, switches, thermometers, manometers, barometers and various medical devices.

**Ballasts.**

For disposal of batteries, electrical lamps and electronic equipment, contact Physical Plant Recycling at 7-3403.

For disposal of ballasts, pesticides and mercury containing devices, contact the Health and Safety Office at 7-0794.

## DISCIPLINARY ACTION

Adherence to safety rules and regulations is essential to the success of Eastern Michigan University. Subject to the provisions of the specific collective bargaining agreement for the employee, Eastern Michigan University supports the following recommendations for disciplinary action:

First Offense:	Verbal Warning
Second Offense:	Written Warning
Third Offense:	Warning and three day suspension without pay
Fourth Offense:	Written Warning and five day suspension without pay
Fifth Offense:	Termination

Disciplinary action applies to any employee violating a safety rule and supervisors not enforcing the rules.

## RELATED SAFETY PROGRAMS

Related safety programs include:

- Bloodborne Pathogens
- Confined Space Entry
- Emergency Response Plan
- Hearing Conservation
- Laboratory Safety/Chemical Hygiene Plan
- Lockout/Tagout
- Personal Protective Equipment
- Powered Groundskeeping Equipment
- Powered Industrial Trucks
- Respiratory Protection

### **Health and Safety Information**

If you have any questions regarding the safety policy and procedures of Eastern Michigan University, do not hesitate to contact the Health and Safety Office at 487-0794.



**EASTERN MICHIGAN UNIVERSITY**  
*Department of Risk Management and Workers' Compensation*

**Employee Procedures for Occupational Injuries or Illnesses**

**SEEK MEDICAL ATTENTION IMMEDIATELY IN THE EVENT OF AN EMERGENCY**

**Step 1:** Notify your supervisor immediately after a work related injury or illness occurs.

**Step 2:** Complete a **Report of Employee Occupational Injury** form in its entirety and attach additional information or reports (example: police reports, departmental reports, etc.) when applicable.

**Step 3:** Submit the report to your supervisor and retain a copy for your records.

**Step 4:** Determine whether or not you require medical treatment.

**MWorks Occupational Health Clinic is Eastern Michigan University's designated health care provider for all work-related injuries. If medical treatment is necessary, you must go to MWorks for the first 10 days of treatment.**

**Monday – Friday (7:00 a.m. – 5:00 p.m.)**

**MWorks Occupational Health Clinic**

University of Michigan Hospital  
1500 East Medical Center Drive  
Room UHB1 A244  
Ann Arbor, MI 48109  
(734) 998-8788

*Use Emergency Room Entrance, Free Valet Parking Available*

**After Hours and Weekends**

**University of Michigan Hospital**

Urgent Care Clinic/Emergency Department  
1500 East Medical Center Drive  
Ann Arbor, MI 48109

**Medical care will not be authorized unless the Department of Risk Management and Workers' Compensation is notified of your injury. Exceptions may be made in the event of an emergency.**

**Step 5:** Advise your physician and physician's billing department that your injury or illness occurred at work. For questions about billing, your physician's office should contact the Department of Risk Management and Workers' Compensation at (734) 487-1357.

**Step 6:** Your physician will provide you with a statement of your physical ability. Keep a copy for your records and present the original to your supervisor. Discuss this statement with your supervisor to determine whether or not you may return to work. Continue to provide your supervisor with updated medical statements.

**If you are unable to return to work, YOU must IMMEDIATELY notify the Department of Risk Management and Workers' Compensation at (734) 487-1357 for further instructions.**

**Department of Risk Management and Workers' Compensation  
11 Welch Hall, Ypsilanti, Michigan 48197  
Phone (734) 487-1357 • Fax (734) 487-6827**



# EASTERN MICHIGAN UNIVERSITY

*Department of Risk Management and Workers' Compensation*

## Supervisor Procedures for Occupational Injuries or Illnesses

ACCIDENTS RESULTING IN A FATALITY OR ANY HOSPITALIZATION OF 3 OR MORE EMPLOYEES SUFFERING INJURY FROM THE SAME ACCIDENT, OR ILLNESS FROM EXPOSURE TO THE SAME HEALTH HAZARD ASSOCIATED WITH THEIR EMPLOYMENT, MUST BE REPORTED IMMEDIATELY.

### SEEK MEDICAL ATTENTION IMMEDIATELY IN THE EVENT OF AN EMERGENCY

- Step 1:** In the event an Eastern Michigan University employee is injured in the course of their employment, advise the employee to complete sections A-E of a **Report of Employee Occupational Injury** form.
- Step 2:** Complete sections F – K of the supervisor's section of the report immediately after the accident occurs, attach additional information or reports (example: police incident reports, departmental reports, etc.) when applicable.
- Step 3:** If the employee states that there were witnesses to the injury, discuss the injury with the witnesses and submit pertinent documentation via email to the Department of Risk Management and Workers' Compensation.
- Step 4:** Deliver the original report to the Department of Risk Management and Workers' Compensation as soon as practical but no later than **24-hours** after the accident (a faxed copy is acceptable but must be followed by the original).
- Step 5:** If the employee determines he/she needs medical treatment, direct him/her to **MWorks Occupational Health Clinic**. MWorks is the University's designated Workers' Compensation health care provider (see attached map).

**The Department of Risk Management must be notified of the injury in order to authorize medical treatment. If the injured employee is seeking medical treatment, notify Risk Management via the Report of Employee Occupational Injury form or telephone call.**

- Step 6:** The injured employee will receive a statement of their physical ability from the treating physician. Determine whether or not you can accommodate the employee's restrictions. Deliver the original statement of physical ability to the Department of Risk Management within 24 hours of receipt.

**If you are unable to accommodate the injured employee's restrictions, contact the Department of Risk Management and Workers' Compensation IMMEDIATELY at 487-1357 for further instruction.**

- Step 7:** When you are able to accommodate the employee, notify the Department of Risk Management and Workers' Compensation immediately upon the employee's return to work.

**Department of Risk Management and Workers' Compensation  
11 Welch Hall, Ypsilanti, MI 48187  
Phone (734) 487-1357 • Fax (734) 487-6827**



**EASTERN MICHIGAN UNIVERSITY**  
*Department of Risk Management and Workers' Compensation*  
**Report of Employee Occupational Injury**

**Sections A-E to be completed by the injured EMPLOYEE**

**Section A: Employee Information**

1. Name: \_\_\_\_\_ 2. Social Security #: \_\_\_\_\_  
Last First Middle
3. Home Address: \_\_\_\_\_  
Number Street (Apt #) City State Zip Code
4. Phone #: (\_\_\_\_) \_\_\_\_\_ 5. Birthdate: \_\_\_\_\_ 6. Gender: **M** **F**  
Home Work (mm/dd/yy)
7. Date of hire by the University: \_\_\_\_\_ 8. Do you claim on-the-job injury? **Y** **N**  
(mm/dd/yy)

**Section B: Accident Information**

9. Date of Accident: \_\_\_\_\_ 10. Time of Accident: \_\_\_\_\_ a.m. / p.m.  
(mm/dd/yy)
11. Time shift began on date of injury: \_\_\_\_\_ a.m. / p.m.
12. Location accident occurred: \_\_\_\_\_  
(Be SPECIFIC: Building, Floor, Room, etc.) (Example: Northwest Stairwell of Mark Jefferson, 3<sup>rd</sup> Floor)
13. What were you doing just before the accident occurred? \_\_\_\_\_  
(Be SPECIFIC: Describe activity, tools and equipment or material you were using)
- \_\_\_\_\_
- \_\_\_\_\_
11. What were you doing when accident occurred? \_\_\_\_\_  
(Be SPECIFIC: Task being performed) (Example: Mopping stairs)
- \_\_\_\_\_
- \_\_\_\_\_
15. How did accident occur? \_\_\_\_\_  
(Be SPECIFIC: Describe fully the events that led up to the accident) (Example: Slipped on wet stairs and dropped bucket of water on foot)
- \_\_\_\_\_
- \_\_\_\_\_
16. What object or substance directly harmed you (if any): \_\_\_\_\_  
(Example: chlorine, concrete floor, bucket of water)
17. List any witnesses to the accident: \_\_\_\_\_  
(First and Last names)



**EASTERN MICHIGAN UNIVERSITY**  
Department of Risk Management and Workers' Compensation  
**Report of Employee Occupational Injury**

Sections A-E to be completed by the injured **EMPLOYEE**

**Section C: Injury Information**

18. What body part(s) is affected? \_\_\_\_\_ 19. Nature of injury: \_\_\_\_\_  
(Example: LEFT Foot/Ankle) (Example: Sprain, bruise, cut)
20. Did you seek medical attention? **Y** **N** 19. If yes, where: \_\_\_\_\_  
(MWorks Occupational Health Clinic is the University's designated WC Health Care Provider)
21. When did you receive medical attention? \_\_\_\_\_  
Date Time
22. Did you lose full days of work due to this injury? **Y** **N** 21. If yes, when: \_\_\_\_\_  
Dates From To

**Section D: Supervisor Information**

23. Date and time reported to Supervisor: \_\_\_\_\_ 24. Was it reported the day it occurred? **Y** **N**  
Date Time
25. If no, why was there a delay in reporting? \_\_\_\_\_

**Section E: Signature Information**

**By signing this Report of Employee Occupational Injury, I, the undersigned injured employee acknowledge that the above statement is true and the accident and injury occurred within the course of employment at Eastern Michigan University.**

**Those who commit fraud will be prosecuted to the fullest extent of the law.**

24. Signature of Employee: \_\_\_\_\_ Date \_\_\_\_\_
26. Signature of Supervisor: \_\_\_\_\_ Date \_\_\_\_\_  
(Signifies receipt of employee's report but does not acknowledge content as fact)

**For Risk Management Purposes ONLY**

Location Code: \_\_\_\_\_ Fund: **Auxiliary** **General** Division: \_\_\_\_\_

RO  MO  IND  Claim #: \_\_\_\_\_



# EASTERN MICHIGAN UNIVERSITY

Department of Risk Management and Workers' Compensation

## Report of Employee Occupational Injury

Sections F – K to be completed by the SUPERVISOR

### Section F: Employee Information

1. Employee's Name: \_\_\_\_\_  
Last First Middle
2. Employee's Classification and Grade: \_\_\_\_\_ 3. Job Title: \_\_\_\_\_  
(Example: FM-10) (Example: Groundskeeper)
4. Type of Employee: **Reg** **Temp** **Student** (Circle One) 5. Fund / Org: \_\_\_\_\_  
(Example: G000345, 127450)
6. Type of Fund: **General** **Auxiliary** **Other:** \_\_\_\_\_ (Circle One)
7. Division: \_\_\_\_\_ 8. Department: \_\_\_\_\_  
(Example: Business & Finance) (Example: Physical Plant)

### Section G: Accident Information

9. Date of Accident: \_\_\_\_\_ 10. Time of Accident: \_\_\_\_\_ a.m. / p.m.  
(mm/dd/yy)
11. Date reported to Supervisor: \_\_\_\_\_ 12. Time reported to Supervisor: \_\_\_\_\_ a.m. / p.m.  
(mm/dd/yy)

### Section H: Medical Information

13. Did employee go to **MWorks Occupational Health Clinic**? **Y** **N**
14. If no, did employee seek medical attention elsewhere? **Y** **N** 15. If yes, where? \_\_\_\_\_

### Section I: Lost Time Information

16. Did the employee lose full days away from work due to the alleged work related injury? **Y** **N**
17. If yes, last date worked: \_\_\_\_\_ 18. Date employee returned to work: \_\_\_\_\_  
(mm/dd/yy) (mm/dd/yy)

### Section J: Safety Information

19. Does employee's statement coincide with your findings? **Y** **N** 20. If no, state any inconsistencies you found while investigating employee's statement of what happened: \_\_\_\_\_  
\_\_\_\_\_
21. Did the injury result from a violation of a rule that is clearly announced and regularly enforced? \_\_\_\_\_  
\_\_\_\_\_

### Section K: Supervisor Information

22. Name of Supervisor (Please **PRINT**): \_\_\_\_\_
23. Signature of Supervisor: \_\_\_\_\_ (date)
24. Supervisor's Phone #: \_\_\_\_\_ 25. Times available: \_\_\_\_\_

## MWorks Occupational Health Clinic Hours

Monday through Friday

7:00 a.m. – 5:00 p.m.

## Evenings, Weekends and Holidays

Urgent Care Clinic/Emergency Department

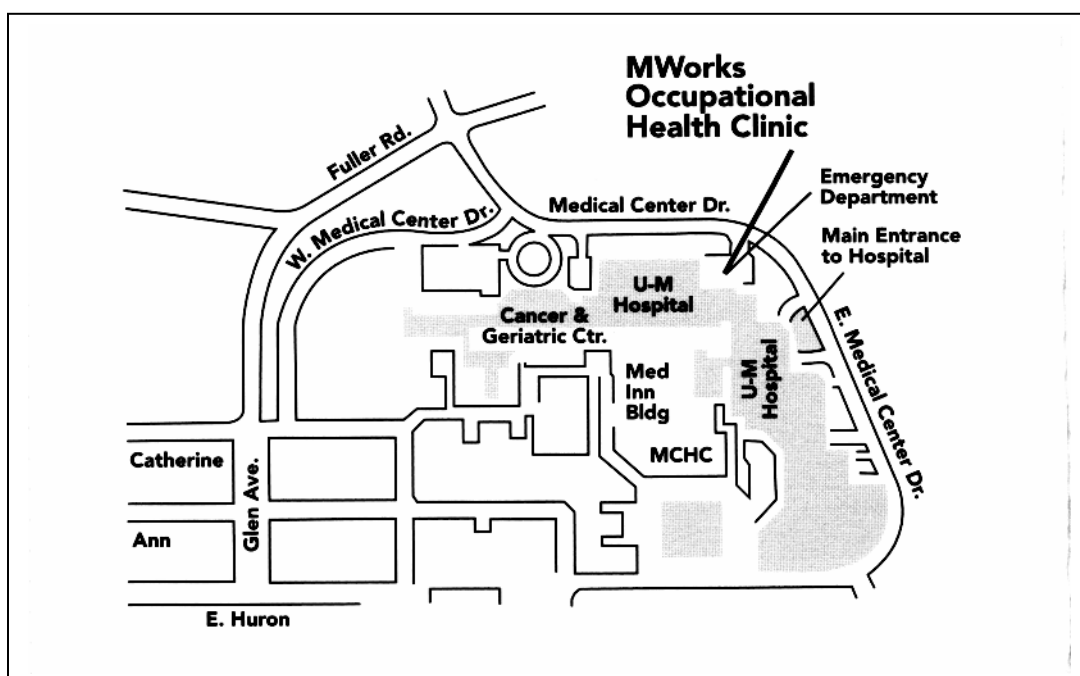
### One Location

University of Michigan Hospital

1500 East Medical Center Drive

Ann Arbor, MI 48109

Phone: (734) 998-8788



### Directions from Eastern Michigan University

Head West on North Huron River Drive

Turn North (right) on East Huron River Drive

Head North (right) on Dixboro

Head West (left) on Geddes

Geddes becomes Fuller

Turn left on East Medical Center Drive

*Follow signage and enter through the Emergency Department*

### Free Valet Parking

Just drive up to the Emergency Department

Entrance and a valet attendant will take your car.

MSDS Number: **I8840** \* \* \* \* \* *Effective Date: 05/04/07* \* \* \* \* \* *Supersedes: 08/27/04*

# MSDS **Material Safety Data Sheet**

From: Mallinckrodt Baker, Inc.  
222 Red School Lane  
Phillipsburg, NJ 08865



24 Hour Emergency Telephone: 908-859-2151  
CHEMTREC: 1-800-424-9300

National Response in Canada  
CANUTEC: 613-996-6666

Outside U.S. and Canada  
Chemtec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

## ISOPROPYL ALCOHOL (90 - 100%)

### 1. Product Identification

**Synonyms:** 2-Propanol; sec-propyl alcohol; isopropanol; sec-propanol; dimethylcarbinol

**CAS No.:** 67-63-0

**Molecular Weight:** 60.10

**Chemical Formula:** (CH<sub>3</sub>)<sub>2</sub>CHOH

**Product Codes:**

J.T. Baker: 0562, 5082, 9037, 9080, U298

Mallinckrodt: 0562, 3027, 3031, 3032, 3035, 3037, 3043, 4359, 6569, H604, H982, V555, V566, V681

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
Hazardous	-----	-----
Isopropyl Alcohol	67-63-0	90 - 100%
Water	7732-18-5	0 - 10%
No		

### 3. Hazards Identification

## Emergency Overview

-----

**WARNING! FLAMMABLE LIQUID AND VAPOR. HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE IRRITATION TO SKIN.**

**SAF-T-DATA<sup>(tm)</sup>** Ratings (Provided here for your convenience)

-----

Health Rating: 2 - Moderate

Flammability Rating: 3 - Severe (Flammable)

Reactivity Rating: 2 - Moderate

Contact Rating: 3 - Severe

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER

Storage Color Code: Red (Flammable)

-----

## Potential Health Effects

-----

### **Inhalation:**

Inhalation of vapors irritates the respiratory tract. Exposure to high concentrations has a narcotic effect, producing symptoms of dizziness, drowsiness, headache, staggering, unconsciousness and possibly death.

### **Ingestion:**

Can cause drowsiness, unconsciousness, and death. Gastrointestinal pain, cramps, nausea, vomiting, and diarrhea may also result. The single lethal dose for a human adult = about 250 mls (8 ounces).

### **Skin Contact:**

May cause irritation with redness and pain. May be absorbed through the skin with possible systemic effects.

### **Eye Contact:**

Vapors cause eye irritation. Splashes cause severe irritation, possible corneal burns and eye damage.

### **Chronic Exposure:**

Chronic exposure may cause skin effects.

### **Aggravation of Pre-existing Conditions:**

Persons with pre-existing skin disorders or impaired liver, kidney, or pulmonary function may be more susceptible to the effects of this agent.

---

## 4. First Aid Measures

### **Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

### **Ingestion:**

Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

### **Skin Contact:**

Immediately flush skin with plenty of water for at least 15 minutes. Call a physician if irritation develops.

### **Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

---

## 5. Fire Fighting Measures

**Fire:**

Flash point: 12C (54F) CC

Autoignition temperature: 399C (750F)

Flammable limits in air % by volume:

lel: 2.0; uel: 12.7

Listed fire data is for Pure Isopropyl Alcohol.

**Explosion:**

Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Contact with strong oxidizers may cause fire or explosion. Vapors can flow along surfaces to distant ignition source and flash back.

Sensitive to static discharge.

**Fire Extinguishing Media:**

Water spray, dry chemical, alcohol foam, or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

---

## 6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures.

J. T. Baker SOLUSORB® solvent adsorbent is recommended for spills of this product.

---

## 7. Handling and Storage

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Small quantities of peroxides can form on prolonged storage. Exposure to light and/or air significantly increases the rate of peroxide formation. If evaporated to a residue, the mixture of peroxides and isopropanol may explode when exposed to heat or shock.

---

## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**

For Isopropyl Alcohol (2-Propanol):

-OSHA Permissible Exposure Limit (PEL):

400 ppm (TWA)

-ACGIH Threshold Limit Value (TLV):

200 ppm (TWA), 400 ppm (STEL), A4 - not classifiable as a human carcinogen.

**Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**Personal Respirators (NIOSH Approved):**

If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. **WARNING:** Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Neoprene and nitrile rubber are recommended materials.

**Eye Protection:**

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

---

## 9. Physical and Chemical Properties

**Appearance:**

Clear, colorless liquid.

**Odor:**

Rubbing alcohol.

**Solubility:**

Miscible in water.

**Specific Gravity:**

0.79 @ 20C/4C

**pH:**

No information found.

**% Volatiles by volume @ 21C (70F):**

100

**Boiling Point:**

82C (180F)

**Melting Point:**

-89C (-128F)

**Vapor Density (Air=1):**

2.1

**Vapor Pressure (mm Hg):**

44 @ 25C (77F)

**Evaporation Rate (BuAc=1):**

2.83

---

## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage. Heat and sunlight can contribute to instability.

**Hazardous Decomposition Products:**

Carbon dioxide and carbon monoxide may form when heated to decomposition.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Heat, flame, strong oxidizers, acetaldehyde, acids, chlorine, ethylene oxide, hydrogen-palladium combination, hydrogen peroxide-sulfuric acid combination, potassium tert-butoxide, hypochlorous acid, isocyanates, nitroform, phosgene, aluminum, oleum and perchloric acid.

**Conditions to Avoid:**

Heat, flames, ignition sources and incompatibles.

## 11. Toxicological Information

Oral rat LD50: 5045 mg/kg; skin rabbit LD50: 12.8 gm/kg; inhalation rat LC50: 16,000 ppm/8-hour; investigated as a tumorigen, mutagen, reproductive effector.

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Isopropyl Alcohol (67-63-0)	No	No	3
Water (7732-18-5)	No	No	None

## 12. Ecological Information

**Environmental Fate:**

When released into the soil, this material is expected to quickly evaporate. When released into the soil, this material may leach into groundwater. When released into the soil, this material may biodegrade to a moderate extent. When released to water, this material is expected to quickly evaporate. When released into the water, this material is expected to have a half-life between 1 and 10 days. When released into water, this material may biodegrade to a moderate extent. This material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life between 1 and 10 days. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition.

**Environmental Toxicity:**

The LC50/96-hour values for fish are over 100 mg/l. This material is not expected to be toxic to aquatic life.

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

### Domestic (Land, D.O.T.)

-----  
Proper Shipping Name: ISOPROPANOL

Hazard Class: 3

UN/NA: UN1219

Packing Group: II

Information reported for product/size: 200L

### International (Water, I.M.O.)

-----  
Proper Shipping Name: ISOPROPANOL

Hazard Class: 3

UN/NA: UN1219

Packing Group: II

Information reported for product/size: 200L

## 15. Regulatory Information

### -----\Chemical Inventory Status - Part 1\-----

Ingredient	TSCA	EC	Japan	Australia
Isopropyl Alcohol (67-63-0)	Yes	Yes	Yes	
Water (7732-18-5)	Yes	Yes	Yes	

Yes

Yes

### -----\Chemical Inventory Status - Part 2\-----

Ingredient	Korea	--Canada--		
		DSL	NDSL	Phil.
Isopropyl Alcohol (67-63-0)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	No	Yes

### -----\Federal, State & International Regulations - Part 1\-----

Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
Isopropyl Alcohol (67-63-0)	No	No	Yes	No
Water (7732-18-5)	No	No	No	No

### -----\Federal, State & International Regulations - Part 2\-----

Ingredient	CERCLA	-RCRA-	-TSCA-
		261.33	8(d)
Isopropyl Alcohol (67-63-0)	No	No	No
Water (7732-18-5)	No	No	No

No

Chemical Weapons Convention: No      TSCA 12(b): No      CDTA: Yes

SARA 311/312: Acute: Yes Chronic: Yes Fire: Yes Pressure: No  
Reactivity: No (Mixture / Liquid)

**Australian Hazchem Code:** 2[S]2

**Poison Schedule:** None allocated.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 16. Other Information

**NFPA Ratings:** Health: 1 Flammability: 3 Reactivity: 0

**Label Hazard Warning:**

WARNING! FLAMMABLE LIQUID AND VAPOR. HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE IRRITATION TO SKIN.

**Label Precautions:**

Keep away from heat, sparks and flame.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

Avoid breathing vapor or mist.

Avoid contact with eyes, skin and clothing.

**Label First Aid:**

If swallowed, give large amounts of water to drink. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

No Changes.

**Disclaimer:**

\*\*\*\*\*

**Mallinckrodt Baker, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. MALLINCKRODT BAKER, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MALLINCKRODT BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.**

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**Prepared by:** Environmental Health & Safety

Phone Number: (314) 654-1600 (U.S.A.)