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KENT STATE UNIVERSITY

HAZARD COMMUNICATION PROGRAM

Scope

This written Hazard Communication Program describes the policies, practices, and procedures for Kent State University compliance with the Occupational Safety and Health Administration's Hazard Communication Standard (29 CFR 1910.1200) including the following items:

1) Material Safety Data Sheets;
2) Labeling and other forms of warning; and
3) Employee information and training.

Additional information is also included in this written program regarding the following:

1) The availability of our inventory of hazardous chemicals;
2) Methods for informing employees of the hazards of non-routine tasks; and
3) Methods of informing contractors of hazardous materials in areas where they may be working.

This program does not address the following items since they are exempt under the standard:

1) Any hazardous waste as such term is defined by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 et seq.), when subject to regulations issued under that Act by the Environmental Protection Agency;
2) Tobacco or tobacco products;
3) Wood or wood products;
4) Articles (Note: Articles are defined as manufactured items which are formed to a specific shape or design, which have end use function(s) dependent in whole or in part upon that shape or design during end use, and which do not release, or otherwise result in exposure to, a hazardous chemical or material under normal conditions of use or in foreseeable emergencies.); and
5) Foods, drugs, or cosmetics intended for personal consumption by employees while in the workplace.

This program applies to the following Kent State University departments and areas:
1) Campus Environment & Operations - Glass Shop, Carpenter Shop, Paint Shop, Grounds Shop, Zone Shops, Custodial Department, Powerplant, and HVAC

2) Residence Services - Custodial Department

3) Student Center - Maintenance Department and Custodial Department

4) Golf Course - Maintenance Shop, Grounds

5) Ice Arena - Maintenance Shop

6) University Dining Services

7) Any other department or area where chemicals are known to be present in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency (Note: Consumer products, such as paper correction fluid, are exempt under the standard if they are used in the same manner as consumer use, and if the duration and frequency of exposure is no more than that experienced by consumers.)

This program is not applicable for scientific laboratories since they are covered under the OSHA Occupational Exposure to Hazardous Chemicals in Laboratories Standard (29 CFR 1910.1450). "Laboratory use of hazardous chemicals" means handling or use of such chemicals in which all of the following conditions are met:

1) Chemical manipulations are carried out on a "laboratory scale" (Note: Laboratory scale means work with substances in which the containers used for reactions, transfers, and other handling of substances are designed to be easily and safely manipulated by one person);

2) Multiple chemical procedures or chemicals are used;

3) The procedures involved are not part of a production process, nor in any way simulate a production process; and

4) Protective laboratory practices and equipment are available and in common use to minimize the potential for employee exposure to hazardous chemicals.

Access

A copy of the Kent State University Hazard Communication Program will be made available for employee review. Hazard information in the form of Material Safety Data Sheets (MSDS) for the chemical hazards in the work area will also be available for consultation by employees. The written program and relevant MSDS’s will be maintained in each department covered under the Hazard Communication Standard and will be immediately accessible to employees at that work location, their representatives, and all government entities with an interest in occupational safety and health.
A master chemical inventory of each department will be maintained by the Hazard Communication Program Administrator.

The specific locations of the written program and the MSDS’s are described in the relevant Department Hazard Communication Program, which is included in Appendix 1.

**Employee Questions**

Employee questions concerning the Hazard Communication Program should be directed through their immediate supervisor to the Hazard Communication Program Administrator.

**General Responsibilities**

Each department is responsible to complete an Inventory of Potentially Hazardous Materials and forward a copy to the Hazard Communication Program Administrator. Each department is responsible to maintain Material Safety Data Sheets (MSDS) on each product listed on their inventory form.

**Specific Responsibilities**

The President of the University is ultimately responsible for the health and safety of the employees of Kent State University.

The Hazard Communication Program Administrator is the Manager, Occupation Health and Safety and has overall management responsibility for establishment of practices and procedures to effectively implement the Hazard Communication Program. This includes the maintenance of a master chemical inventory and master MSDS’s, as well as establishment and coordination of a training program of a general nature for all affected employees.

Each department has the responsibility of coordinating the ordering of hazardous chemicals and assuring that all chemical suppliers provide MSDS information to the appropriate individual.

Department chairpersons, directors, and managers are responsible for assuring that the relevant lists of chemicals, MSDS’s, and other safety information are available in their work area.

Supervisors are individuals who have direct line supervision of employees. Their responsibility is to maintain the appropriate safety information on the hazardous chemicals and provide specific training for their employees on those chemicals used in their work place.

**Hazard Determination**

Chemical manufacturers and importers must determine whether the chemicals they manufacture, process, formulate, repackage, or import are hazardous, and if so, what the hazards are.
All other employers may rely on these determinations, and do not have to make separate hazard determinations on the chemicals in use. Kent State University will be relying on vendor-supplied MSDS’s for our hazard determinations. However, according to the Hazard Communication Standard, it is the responsibility of Kent State University to assure that we have MSDS’s for all hazardous materials used and that the MSDS’s are accurate and complete.

All incoming MSDS’s will be reviewed for accuracy and completion according to the MSDS Requirements Section of this program by the person designated in the Department Hazard Communication Program located in Appendix 1.

**Labels and Other Forms of Warning**

All containers of hazardous materials must bear a label that is fixed to the outside of the container. The responsibility for labeling falls upon the chemical manufacturer, importer, or distributor, who must ensure that each container sent out is properly labeled, tagged, or marked according to the OSHA Hazard Communication Standard or, in the case of OSHA regulated substances, ensure that the labels are in accordance with the requirements of that specific standard.

**Incoming Container Labeling**

Each department will require appropriate vendor labeling of all purchased chemicals or materials deemed potentially hazardous.

The department receiving the shipment will not accept any material which is considered hazardous unless it is properly labeled. The label shall contain as a minimum:

1) The identity of the material;

2) Appropriate hazard warnings; and

3) The name and address of the chemical manufacturer, importer, or other responsible party;

Labels must be legible, printed in English, prominently displayed, and easily referenced to the MSDS for that material. It is the responsibility of the department receiving the shipment to notify the Procurement Department if a material does not appear to be properly labeled.

Each department will assure that the manufacturer's original hazard identification labels are not removed or defaced on containers in the workplace. Kent State University personnel may add information to these containers, but the original manufacturer's labels are not to be destroyed, removed, or defaced unless immediately replaced with another label containing the required information.
Outgoing Containers

While Kent State University does not manufacture or distribute hazardous chemicals, a situation may arise where either full or partially empty containers may need to be returned to the manufacturer. If the original label is defaced or unreadable on any of these containers, the department will attempt to get another label from the manufacturer before returning the container. If a label cannot be secured, a copy or facsimile of the original label will be used which contains all of the information on the original label.

Process Containers (Stationary and Portable)

All containers of hazardous materials within the workplace must be labeled, except as noted below, with at least the following information:

1) Identity of the material; and
2) Appropriate hazard warnings to ensure employee protection.

Where the contents of stationary process containers of hazardous chemicals change frequently, or where their labels could be obscured or destroyed by heat, spillage, or other factors, signs or placards may be posted to convey the required information.

The only types of containers that need not be labeled are those portable ones which meet all of the following requirements:

1) The entire contents are for immediate use by the person making the transfer;
2) The portable container is used only by and remains under the control of the person making the transfer; and
3) The portable container is used only within the work shift during which it was originally filled.

Secondary Labeling System

Secondary hazard labeling must be applied in those cases where a hazardous chemical is transferred to another container or where a manufacturer's label has become defaced or illegible.

Kent State University will utilize the Hazardous Material Identification System (HMIS), designed by the National Paint and Coatings Association, for all necessary hazard labeling. This system utilizes hazard rankings from 1 to 4, with 4 representing the highest hazard, for each of three different types of hazards, including Flammability, Health and Reactivity. In addition, the name of the hazardous substance and a recommended personal protective equipment code must also be filled in on the label.
While the HMIS hazard ratings are often provided by the manufacturer on the Material Safety Data Sheet, there may be instances where supervisors completing the label will need to assign the hazard ratings based on the information contained in the appropriate sections of the Material Safety Data Sheet. An explanation of the ratings will be included as part of the employee training program. In addition, reference information on assigning and interpreting the ratings will be available in the work area.

**Labeling Exclusions**

The Hazard Communication Standard does not require labeling of the following chemicals:

1) Any pesticide as such term is defined in the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency;

2) Any food, food additive, color additive, drug, cosmetic, or medical or veterinary device, including materials intended for use as ingredients in such products (e.g., flavors and fragrances) as such terms are defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.) and regulations issued under that Act, when they are subject to the labeling requirements under that Act by the Food and Drug Administration;

3) Any distilled spirits (beverage alcohols), wine, or malt beverage intended for nonindustrial use, as such terms are defined the Federal Alcohol Administration Act (27 U.S.C. 201 et seq.) and regulations issued under that Act, when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Bureau of Alcohol, Tobacco, and Firearms; and


**Hazardous Chemical List**

The Hazard Communication Program Administrator will maintain a master list of hazardous chemicals used throughout Kent State University. Each department, in accordance with the Department Hazard Communication Program, is responsible for generating and maintaining the list of hazardous chemicals known to be present in the work area. The departmental hazardous chemical list is located in Appendix 2. These lists will be updated as needed when new chemicals are brought in or old ones are phased out. Each department is responsible for informing the Hazard Communication Program Administrator of changes to the departmental hazardous list.
Material Safety Data Sheets (MSDS)

General

A list of all chemicals used in each department will be maintained in Appendix 2. All product containers must be labeled with the chemical name, trade name, or other identification so that all employees can associate the chemical container with the appropriate MSDS. The listed MSDS’s will be maintained in their departmental plan, kept in a manner that will be understandable to employees and will be immediately accessible to all employees. It is important that the MSDS’s be updated as new chemicals are added. An acceptable MSDS must be obtained before releasing any new material for use.

MSDS Requirements

The MSDS’s received from suppliers must contain specific information as outlined in the standard and summarized below. This information must appear on the MSDS’s. If any information is lacking or not clearly stated, the supplier should be requested to supply the missing information. Until a complete MSDS is received, the material should not be released for use. MSDS informational requirements include:

1) The name of the material on the MSDS and container label must be the same.
2) For "pure" (single) substances, both the chemical and common name must be given.
3) For mixtures previously tested for hazard, the MSDS must list the chemical and common names of the ingredients contributing to the hazard.
4) For mixtures not previously tested for hazards, the MSDS must list the chemical and common name of all ingredients present at 1% or greater which are determined to be health hazards and all ingredients present at 0.1% or greater which have been identified as carcinogens. The MSDS must also list the chemical and common name of all ingredients determined to present a physical hazard.
5) Physical and chemical characteristics.
6) Physical hazards.
7) Health hazards.
8) Primary route(s) of entry.
9) Recommended safe exposure limits.
10) Safe handling and use precautions.
11) Appropriate engineering controls, work practices, and/or personal protective equipment recommended.

12) Emergency and first aid procedures.

13) Date of preparation of the MSDS or last change to it.

14) Name, address, and telephone number of the responsible party preparing or distributing the MSDS who can provide additional information on the hazardous chemical.

15) Categories where no relevant information exists must be so marked.

16) One sheet may be used for complex mixtures having similar hazards and contents.

Collection, Dissemination, and Maintenance

If an MSDS has not been supplied by the vendor, the respective department has the responsibility for contacting the vendor to obtain one. Documentation including letters or telephone logs should be maintained as proof of efforts to contact vendors. Vendors are required by law to supply valid MSDS’s for hazardous materials. A sample MSDS request form is shown in Appendix 3. Vendors providing inadequate responses for MSDS’s should be reported to the Purchasing Department.

The person maintaining the departmental MSDS books will periodically exam the books and attempt to obtain updated MSDS’s for any which were prepared more than three years prior.

Employee Information and Training

Employee Information

Every Kent State University employee will be informed of the following:

1) The requirements of the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and any other similar "Right-to-Know" legislation;

2) The location and availability of the Written Hazard Communication Program, including the required list of hazardous chemicals and corresponding MSDS’s;

3) Appendices A & B of the standard and the MSDS glossary of terms; and

4) Any operations in their work area where hazardous chemicals are present.

All personnel currently employed will be given this information as well as new hires during their orientation program.
In every Kent State University facility where chemicals or hazardous materials are used or stored, a notice shall be posted at a location where notices to employees are normally posted. The notice shall inform employees that they or their designated representatives have a right to information from their employer regarding the toxic or hazardous effects of the chemicals or hazardous materials and the circumstances under which these effects may be produced. The notice should also inform employees of procedures to be followed or persons to contact to obtain the information. This notice is contained in Appendix 4.

**Employee Training**

For every employee working in an area where chemicals or hazardous materials are used or stored, training will be provided based on the nature of the hazards. The training will include:

1) The physical and health hazards of the chemicals or hazardous materials in the work area;

2)Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area;

3)The measures employees can take to protect themselves from these hazards, including appropriate work practices, emergency procedures, and personal protective equipment; and

4)The details and proper use of the Kent State University Hazard Communication Program as well as personnel to contact for additional information.

Kent State University will provide both general Hazard Communication Training as well as chemical specific training. The general training will be the responsibility of the Hazard Communication Program Administrator and will include training regarding the following information:

1) The OSHA Hazard Communication Standard;

2) The Kent State University Hazard Communication Program

2) Reading and using a Material Safety Data Sheet;

3) Container Labeling, including the HMIS labeling system;

4) Access to Information

Each department will be responsible for training on the hazards associated with specific chemical use, including:

1) The physical and health hazards associated with the chemicals;
2) Location of the written program, MSDS’s and other reference materials;

3) Methods of detection in case of release and/or spill;

4) Emergency procedures;

5) Proper personal protective equipment;

6) Labeling system; and

7) An explanation of non-routine exposures.

Employee training will be conducted for all employees currently assigned to work areas where chemicals or hazardous materials are used, according the hazards in their specific area. Employees who may be assigned to the work area on a temporary basis must also be trained.

Employees will be trained upon initial assignment to a work area where hazardous materials are used. Whenever a new hazard is introduced into the work area, the affected employees will be trained in the nature of the hazard and the warning and protective measures appropriate for that hazard.

A training log will be maintained by each department in order to document chemical specific training.

**Non-Routine Tasks**

Employees required to perform non-routine tasks shall be informed of any hazards associated with the tasks by their supervisor prior to starting work on the task. If the supervisor requires assistance in determining the hazards and specifying protective procedures, the Hazard Communication Program Administrator should be contacted. Examples of non-routine tasks may include tank cleaning, confined space entry, and work involving unlabeled pipes.

**Contractors**

On-site contractors working in areas where they may potentially be exposed to hazardous materials shall be informed of the Kent State University Hazard Communication Program and the availability of MSDS’s for the materials to which they may be exposed. This is the responsibility of the Office of the University Architect during pre-construction meetings. Similarly, visitors should receive similar information if a significant amount of time will be spent in areas where hazardous materials are used.

Contractors shall supply a list of all hazardous materials brought on-site and MSDS’s for them to the Office of the University Architect. This information will be maintained for the duration of the project. Information that the contractor employees may be using hazardous materials should be transmitted to employees in the specific work area.
Trade Secrets

The Hazard Communication Standard permits trade secret classification and does not require the disclosures, under any circumstances, of process or percentage of mixture information which is trade secret. Although the exact identity of the material does not have to be listed on the MSDS, the manufacture must state that trade secret ingredient is present, and must fully describe all of the health and physical hazards associated with the material. This section of the standard attempts to balance an employer's need to protect secrets and the health professional's need to know the specific identity of chemicals to which employees may be exposed. The only trade secret information that must be disclosed, and then only on very specific conditions, is the identity of a hazardous chemical. The standard permits access to trade secret chemical identities only to health professionals, employees and their representatives. The health professional must demonstrate the need and agree to sign a confidentiality agreement.

Program Audit

The Kent State University Hazard Communication Program will be audited on an annual basis by the Hazard Communication Program Administrator to evaluate the policies and procedures outlined in this document to ensure that they are effective and that Kent State University is in compliance with the OSHA Hazard Communication Standard.
Dear Sir/Madam:

We have recently completed a total chemical inventory and find that we do not have a current Material Safety Data Sheet (MSDS) for your product, "____________________________." Please supply your most current MSDS in accordance with the provisions of 29 CFR 1910.1200 (OSHA Hazard Communication Standard) to our letterhead address, my attention. A current MSDS is needed for the purposes of documentation. If you have made a determination that your product is an "article" and therefore exempt or that it is "non-hazardous", please so advise in writing.

Thank you in advance for your prompt attention to this matter.

Sincerely,

cc: James Dunlap
    Office of Occupational Health and Safety
EMPLOYEE RIGHTS

1. Subject to trade secret provisions, employees and their designated representatives may request, and the employer or employers shall provide, information relating to hazardous chemicals which the employer is required to maintain and release pursuant to 29 CFR 1910.1200, Hazard Communication, and other state and local "Right-to-Know" legislation.

2. No employer shall discharge, or cause to be discharged or otherwise disciplined or in any manner discriminated against, any employee for the reason or reasons that such person has exercised any right, made any claim, or filed any complaint or suit pursuant to this legislation.

3. Any employee or designated representative who believes that a violation of this legislation exists may request an inspection by giving written notice to the office or officer designated by OSHA or the local authorities to receive requests of such violation. Upon request of the person giving such notice, his or her identity and that of the employee referred to in the notice shall, to the extent permitted by federal or state law, be confidential information and shall not be revealed or published.

4. Any employee who has been discharged, disciplined, or otherwise discriminated against by any employer in violation of this legislation may, within one (1) year after violation occurs or one (1) year after the employee first obtains knowledge that a violation has occurred, commence an action in any appropriate court of law.

5. A designated representative, if any, shall have the right to participate in any inspection which results from an employee complaint.

Questions concerning Kent State University's Hazard Communication Program should be directed to that person's immediate supervisor, then to the Hazard Communication Program Administrator as appropriate.

Hazard Communication Program Administrator:
Mr. James Dunlap
Manager, Occupational Health and Safety
Campus Environment & Operations
Phone: (330) 672-9565
Fax: (330) 672-956
Health and Safety Information

James Dunlap
Manager, Occupational Health and Safety
Campus Environment & Operations
Phone:  (330) 672-9565
Fax:    (330) 672-9561

Dennis Baden
Sr. Environmental Compliance Officer
Campus Environment & Operations
Phone:  (330) 673-1980
Fax:    (330) 673-9561

Fire

Edward Moisio
Fire Safety Coordinator
Department of Public Safety
Phone:  (330) 672-0831
Fax:    (330) 672-6226

Kent City Fire Department - Dial 911

Medical

University Health Services
Phone:  (330) 672-2322

Robinson Memorial Hospital
Phone:  (330) 297-2448
Emergency Services:  (330) 297-2850

Chemical Spills

ChemTrec:
General Information -  (800) 262-8200
Emergencies -      (800) 424-9300
APPENDIX 6

DEFINITIONS
| **Employee** | A worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. |
| **Hazard Communication Program** | A written program developed and instituted by Kent State University in order to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200). This program sets forth the policies and procedures regarding Material Safety Data Sheets, container labeling, and employee training. |
| **Hazard Communication Program Administrator** | The Assistant Director for Health and Safety in the Office of Risk Management. The administrator has overall management responsibility for the establishment of practices and procedures to implement the Hazard Communication Program. |
| **Hazardous Chemical** | Any chemical which may present a physical hazard or a health hazard. |
| **Health Hazard** | A chemical for which there is statistically significant evidence that acute or chronic health affects may occur in exposed employees. |
| **HMIS** | Hazardous Material Identification System. A labeling and hazard rating system developed by the National Paint and Coatings Association. |
| **Label** | Any written, printed or graphic sign or symbol displayed on or affixed to containers of hazardous chemicals. A label should identify the hazardous material, appropriate hazard warnings, and name and address of the manufacturer or other responsible party. |
| **MSDS** | Material Safety Data Sheet. Developed and provided by the chemical manufacturer to inform employers of the properties and hazards of the chemical. |
| **Non-Routine Task** | A task which is conducted on an infrequent or non-routine basis which involves the potential exposure to hazardous chemicals (i.e., tank cleaning). |
| **OSHA** | The Occupational Safety and Health Administration. OSHA is part of the Department of Labor and is the regulatory and enforcement agency for safety and health in the industrial sector. |
| **Physical Hazard** | A chemical which is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive), or water-reactive. |
1910.1200(a)

"Purpose."

1910.1200(a)(1)

The purpose of this section is to ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employers and employees. This transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, material safety data sheets and employee training.

1910.1200(b)

"Scope and application."

1910.1200(b)(1)

This section requires chemical manufacturers or importers to assess the hazards of chemicals
which they produce or import, and all employers to provide information to their employees about the hazardous chemicals to which they are exposed, by means of a hazard communication program, labels and other forms of warning, material safety data sheets, and information and training. In addition, this section requires distributors to transmit the required information to employers. (Employers who do not produce or import chemicals need only focus on those parts of this rule that deal with establishing a workplace program and communicating information to their workers. Appendix E of this section is a general guide for such employers to help them determine their compliance obligations under the rule.)

1910.1200(b)(2)

This section applies to any chemical which is known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency.

1910.1200(b)(3)

This section applies to laboratories only as follows:

1910.1200(b)(3)(i)

Employers shall ensure that labels on incoming containers of hazardous chemicals are not removed or defaced;

1910.1200(b)(3)(ii)

Employers shall maintain any material safety data sheets that are received with incoming shipments of hazardous chemicals, and ensure that they are readily accessible during each workshift to laboratory employees when they are in their work areas;

1910.1200(b)(3)(iii)

Employers shall ensure that laboratory employees are provided information and training in accordance with paragraph (h) of this section, except for the location and availability of the written hazard communication program under paragraph (h)(2)(iii) of this section; and,

1910.1200(b)(3)(iv)

Laboratory employers that ship hazardous chemicals are considered to be either a chemical manufacturer or a distributor under this rule, and thus must ensure that any containers of hazardous chemicals leaving the laboratory are labeled in accordance with paragraph (f)(1) of this section, and that a material safety data sheet is provided to distributors and other employers in accordance with paragraphs (g)(6) and (g)(7) of this section.

1910.1200(b)(4)

In work operations where employees only handle chemicals in sealed containers which are not opened under normal conditions of use (such as are found in marine cargo handling,
warehousing, or retail sales), this section applies to these operations only as follows:

1910.1200(b)(4)(i)

Employers shall ensure that labels on incoming containers of hazardous chemicals are not removed or defaced;

..1910.1200(b)(4)(ii)

1910.1200(b)(4)(ii)

Employers shall maintain copies of any material safety data sheets that are received with incoming shipments of the sealed containers of hazardous chemicals, shall obtain a material safety data sheet as soon as possible for sealed containers of hazardous chemicals received without a material safety data sheet if an employee requests the material safety data sheet, and shall ensure that the material safety data sheets are readily accessible during each work shift to employees when they are in their work area(s); and,

1910.1200(b)(4)(iii)

Employers shall ensure that employees are provided with information and training in accordance with paragraph (h) of this section (except for the location and availability of the written hazard communication program under paragraph (h)(2)(iii) of this section), to the extent necessary to protect them in the event of a spill or leak of a hazardous chemical from a sealed container.

1910.1200(b)(5)

This section does not require labeling of the following chemicals:

1910.1200(b)(5)(i)

Any pesticide as such term is defined in the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency;

1910.1200(b)(5)(ii)

Any chemical substance or mixture as such terms are defined in the Toxic Substances Control Act (15 U.S.C. 2601 et seq.), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency;

..1910.1200(b)(5)(iii)

1910.1200(b)(5)(iii)

Any food, food additive, color additive, drug, cosmetic, or medical or veterinary device or product, including materials intended for use as ingredients in such products (e.g. flavors and fragrances), as such terms are defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.) or the Virus-Serum-Toxin Act of 1913 (21 U.S.C. 151 et seq.), and regulations issued under those Acts, when they are subject to the labeling requirements under
those Acts by either the Food and Drug Administration or the Department of Agriculture;

1910.1200(b)(5)(iv)

Any distilled spirits (beverage alcohols), wine, or malt beverage intended for nonindustrial use, as such terms are defined in the Federal Alcohol Administration Act (27 U.S.C. 201 et seq.) and regulations issued under that Act, when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Bureau of Alcohol, Tobacco, and Firearms;

1910.1200(b)(5)(v)

Any consumer product or hazardous substance as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, when subject to a consumer product safety standard or labeling requirement of those Acts, or regulations issued under those Acts by the Consumer Product Safety Commission; and,

1910.1200(b)(5)(vi)

Agricultural or vegetable seed treated with pesticides and labeled in accordance with the Federal Seed Act (7 U.S.C. 1551 et seq.) and the labeling regulations issued under that Act by the Department of Agriculture.

..1910.1200(b)(6)

1910.1200(b)(6)

This section does not apply to:

1910.1200(b)(6)(i)

Any hazardous waste as such term is defined by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 et seq.), when subject to regulations issued under that Act by the Environmental Protection Agency;

1910.1200(b)(6)(ii)

Any hazardous substance as such term is defined by the Comprehensive Environmental Response, Compensation and Liability ACT (CERCLA) (42 U.S.C. 9601 et seq.) when the hazardous substance is the focus of remedial or removal action being conducted under CERCLA in accordance with the Environmental Protection Agency regulations.

1910.1200(b)(6)(iii)

Tobacco or tobacco products;

1910.1200(b)(6)(iv)

Wood or wood products, including lumber which will not be processed, where the chemical manufacturer or importer can establish that the only hazard they pose to employees is the
potential for flammability or combustibility (wood or wood products which have been treated with a hazardous chemical covered by this standard, and wood which may be subsequently sawed or cut, generating dust, are not exempted);

1910.1200(b)(6)(v)

Articles (as that term is defined in paragraph (c) of this section);

1910.1200(b)(6)(vi)

Food or alcoholic beverages which are sold, used, or prepared in a retail establishment (such as a grocery store, restaurant, or drinking place), and foods intended for personal consumption by employees while in the workplace;

1910.1200(b)(6)(vii)

Any drug, as that term is defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.), when it is in solid, final form for direct administration to the patient (e.g., tablets or pills); drugs which are packaged by the chemical manufacturer for sale to consumers in a retail establishment (e.g., over-the-counter drugs); and drugs intended for personal consumption by employees while in the workplace (e.g., first aid supplies);

1910.1200(b)(6)(viii)

Cosmetics which are packaged for sale to consumers in a retail establishment, and cosmetics intended for personal consumption by employees while in the workplace;

1910.1200(b)(6)(ix)

Any consumer product or hazardous substance, as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, where the employer can show that it is used in the workplace for the purpose intended by the chemical manufacturer or importer of the product, and the use results in a duration and frequency of exposure which is not greater than the range of exposures that could reasonably be experienced by consumers when used for the purpose intended;

1910.1200(b)(6)(x)

Nuisance particulates where the chemical manufacturer or importer can establish that they do not pose any physical or health hazard covered under this section;

1910.1200(b)(6)(xi)

Ionizing and nonionizing radiation; and,

1910.1200(b)(6)(xii)

Biological hazards.
"Definitions."

"Article" means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees.

"Assistant Secretary" means the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, or designee.

"Chemical" means any element, chemical compound or mixture of elements and/or compounds.

"Chemical manufacturer" means an employer with a workplace where chemical(s) are produced for use or distribution.

"Chemical name" means 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.

"Combustible liquid" means any liquid having a flashpoint at or above 100 deg. F (37.8 deg. C), but below 200 deg. F (93.3 deg. C), except any mixture having components with flashpoints of 200 deg. F (93.3 deg. C), or higher, the total volume of which make up 99 percent or more of the total volume of the mixture.

"Commercial account" means an arrangement whereby a retail distributor sells hazardous chemicals to an employer, generally in large quantities over time and/or at costs that are below the regular retail price.

"Common name" means any designation or identification such as code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.

"Compressed gas" means:

(i) A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70 deg. F (21.1 deg. C); or

(ii) A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130 deg. F (54.4 deg. C) regardless of the pressure at 70 deg. F (21.1 deg. C); or

(iii) A liquid having a vapor pressure exceeding 40 psi at 100 deg. F (37.8 deg. C) as determined by ASTM D-323-72.

"Container" means any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage
tank, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

"Designated representative" means any individual or organization to whom an employee gives written authorization to exercise such employee's rights under this section. A recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

"Director" means the Director, National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designee.

"Distributor" means a business, other than a chemical manufacturer or importer, which supplies hazardous chemicals to other distributors or to employers.

"Employee" means a worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Workers such as office workers or bank tellers who encounter hazardous chemicals only in non-routine, isolated instances are not covered.

"Employer" means a person engaged in a business where chemicals are either used, distributed, or are produced for use or distribution, including a contractor or subcontractor.

"Explosive" means a chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

"Exposure or exposed" means that an employee is subjected in the course of employment to a chemical that is a physical or health hazard, and includes potential (e.g. accidental or possible) exposure. "Subjected" in terms of health hazards includes any route of entry (e.g. inhalation, ingestion, skin contact or absorption.)

"Flammable" means a chemical that falls into one of the following categories:

(i) "Aerosol, flammable" means an aerosol that, when tested by the method described in 16 CFR 1500.45, yields a flame projection exceeding 18 inches at full valve opening, or a flashback (a flame extending back to the valve) at any degree of valve opening;

(ii) "Gas, flammable" means: (A) A gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of thirteen (13) percent by volume or less; or (B) A gas that, at ambient temperature and pressure, forms a range of flammable mixtures with air wider than twelve (12) percent by volume, regardless of the lower limit;

(iii) "Liquid, flammable" means any liquid having a flashpoint below 100 deg. F (37.8 deg. C), except any mixture having components with flashpoints of 100 deg. F (37.8 deg. C) or higher, the total of which make up 99 percent or more of the total volume of the mixture.

(iv) "Solid, flammable" means a solid, other than a blasting agent or explosive as defined in 1910.109(a), that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited
readily and when ignited burns so vigorously and persistently as to create a serious hazard. A chemical shall be considered to be a flammable solid if, when tested by the method described in 16 CFR 1500.44, it ignites and burns with a self-sustained flame at a rate greater than one-tenth of an inch per second along its major axis.

"Flashpoint" means the minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite when tested as follows:

(i) Tagliabue Closed Tester (See American National Standard Method of Test for Flash Point by Tag Closed Tester, Z11.24-1979 (ASTM D 56-79)) for liquids with a viscosity of less than 45 Saybolt Universal Seconds (SUS) at 100 deg. F (37.8 deg. C), that do not contain suspended solids and do not have a tendency to form a surface film under test; or

(ii) Pensky-Martens Closed Tester (see American National Standard Method of Test for Flash Point by Pensky-Martens Closed Tester, Z11.7-1979 (ASTM D 93-79)) for liquids with a viscosity equal to or greater than 45 SUS at 100 deg. F (37.8 deg. C), or that contain suspended solids, or that have a tendency to form a surface film under test; or

(iii) Setaflash Closed Tester (see American National Standard Method of Test for Flash Point by Setaflash Closed Tester (ASTM D 3278-78)).

Organic peroxides, which undergo autoaccelerating thermal decomposition, are excluded from any of the flashpoint determination methods specified above.

"Foreseeable emergency" means any potential occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment which could result in an uncontrolled release of a hazardous chemical into the workplace.

"Hazardous chemical" means any chemical which is a physical hazard or a health hazard.

"Hazard warning" means any words, pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the specific physical and health hazard(s), including target organ effects, of the chemical(s) in the container(s). (See the definitions for "physical hazard" and "health hazard" to determine the hazards which must be covered.)

"Health hazard" means 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, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes. Appendix A provides further definitions and explanations of the scope of health hazards covered by this section, and Appendix B describes the criteria to be used to determine whether or not a chemical is to be considered hazardous for purposes of this standard.

"Identity" means any chemical or common name which is indicated on the material safety data sheet (MSDS) for the chemical. The identity used shall permit cross-references to be
made among the required list of hazardous chemicals, the label and the MSDS.

"Immediate use" means that the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

"Importer" means the first business with employees within the Customs Territory of the United States which receives hazardous chemicals produced in other countries for the purpose of supplying them to distributors or employers within the United States.

"Label" means any written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals.

"Material safety data sheet (MSDS)" means written or printed material concerning a hazardous chemical which is prepared in accordance with paragraph (g) of this section.

"Mixture" means any combination of two or more chemicals if the combination is not, in whole or in part, the result of a chemical reaction.

"Organic peroxide" means an organic compound that contains the bivalent -O-O-structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

"Oxidizer" means a chemical other than a blasting agent or explosive as defined in 1910.109(a), 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" means a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.

"Produce" means to manufacture, process, formulate, blend, extract, generate, emit, or repackage.

"Pyrophoric" means a chemical that will ignite spontaneously in air at a temperature of 130 deg. F (54.4 deg. C) or below.

"Responsible party" means someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

"Specific chemical identity" means the chemical name, Chemical Abstracts Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.

"Trade secret" means any confidential formula, pattern, process, device, information or compilation of information that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it. Appendix D sets out the criteria to be used in evaluating trade secrets.

"Unstable (reactive)" means 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.

"Use" means to package, handle, react, emit, extract, generate as a byproduct, or transfer.

"Water-reactive" means a chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

"Work area" means a room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

"Workplace" means an establishment, job site, or project, at one geographical location containing one or more work areas.

..1910.1200(d)

1910.1200(d)

"Hazard determination."

1910.1200(d)(1)

Chemical manufacturers and importers shall evaluate chemicals produced in their workplaces or imported by them to determine if they are hazardous. Employers are not required to evaluate chemicals unless they choose not to rely on the evaluation performed by the chemical manufacturer or importer for the chemical to satisfy this requirement.

1910.1200(d)(2)

Chemical manufacturers, importers or employers evaluating chemicals shall identify and consider the available scientific evidence concerning such hazards. For health hazards, evidence which is statistically significant and which is based on at least one positive study conducted in accordance with established scientific principles is considered to be sufficient to establish a hazardous effect if the results of the study meet the definitions of health hazards in this section. Appendix A shall be consulted for the scope of health hazards covered, and Appendix B shall be consulted for the criteria to be followed with respect to the completeness of the evaluation, and the data to be reported.

1910.1200(d)(3)

The chemical manufacturer, importer or employer evaluating chemicals shall treat the following sources as establishing that the chemicals listed in them are hazardous:

1910.1200(d)(3)(i)

29 CFR part 1910, subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA); or,

..1910.1200(d)(3)(ii)

1910.1200(d)(3)(ii)
"Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment," American Conference of Governmental Industrial Hygienists (ACGIH) (latest edition). The chemical manufacturer, importer, or employer is still responsible for evaluating the hazards associated with the chemicals in these source lists in accordance with the requirements of this standard.

1910.1200(d)(4)

Chemical manufacturers, importers and employers evaluating chemicals shall treat the following sources as establishing that a chemical is a carcinogen or potential carcinogen for hazard communication purposes:

1910.1200(d)(4)(i)
National Toxicology Program (NTP), "Annual Report on Carcinogens" (latest edition);

1910.1200(d)(4)(ii)
International Agency for Research on Cancer (IARC) "Monographs" (latest editions); or

1910.1200(d)(4)(iii)
29 CFR part 1910, subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration.

Note: The "Registry of Toxic Effects of Chemical Substances" published by the National Institute for Occupational Safety and Health indicates whether a chemical has been found by NTP or IARC to be a potential carcinogen.

1910.1200(d)(5)

The chemical manufacturer, importer or employer shall determine the hazards of mixtures of chemicals as follows:

1910.1200(d)(5)(i)
If a mixture has been tested as a whole to determine its hazards, the results of such testing shall be used to determine whether the mixture is hazardous;

1910.1200(d)(5)(ii)
If a mixture has not been tested as a whole to determine whether the mixture is a health hazard, the mixture shall be assumed to present the same health hazards as do the components which comprise one percent (by weight or volume) or greater of the mixture, except that the mixture shall be assumed to present a carcinogenic hazard if it contains a component in concentrations of 0.1 percent or greater which is considered to be a carcinogen under paragraph (d)(4) of this section;

1910.1200(d)(5)(iii)
If a mixture has not been tested as a whole to determine whether the mixture is a physical hazard, the chemical manufacturer, importer, or employer may use whatever scientifically valid data is available to evaluate the physical hazard potential of the mixture; and,

1910.1200(d)(5)(iv)

If the chemical manufacturer, importer, or employer has evidence to indicate that a component present in the mixture in concentrations of less than one percent (or in the case of carcinogens, less than 0.1 percent) could be released in concentrations which would exceed an established OSHA permissible exposure limit or ACGIH Threshold Limit Value, or could present a health risk to employees in those concentrations, the mixture shall be assumed to present the same hazard.

1910.1200(d)(6)

Chemical manufacturers, importers, or employers evaluating chemicals shall describe in writing the procedures they use to determine the hazards of the chemical they evaluate. The written procedures are to be made available, upon request, to employees, their designated representatives, the Assistant Secretary and the Director. The written description may be incorporated into the written hazard communication program required under paragraph (e) of this section.

..1910.1200(e)

1910.1200(e)

"Written hazard communication program."

1910.1200(e)(1)

Employers shall develop, implement, and maintain at each workplace, a written hazard communication program which at least describes how the criteria specified in paragraphs (f), (g), and (h) of this section for labels and other forms of warning, material safety data sheets, and employee information and training will be met, and which also includes the following:

1910.1200(e)(1)(i)

A list of the hazardous chemicals known to be present using an identity that is referenced on the appropriate material safety data sheet (the list may be compiled for the workplace as a whole or for individual work areas); and,

1910.1200(e)(1)(ii)

The methods the employer will use to inform employees of the hazards of non-routine tasks (for example, the cleaning of reactor vessels), and the hazards associated with chemicals contained in unlabeled pipes in their work areas.

1910.1200(e)(2)

"Multi-employer workplaces." Employers who produce, use, or store hazardous chemicals at a workplace in such a way that the employees of other employer(s) may be exposed (for
example, employees of a construction contractor working on-site) shall additionally ensure that the hazard communication programs developed and implemented under this paragraph (e) include the following:

1910.1200(e)(2)(i)

The methods the employer will use to provide the other employer(s) on-site access to material safety data sheets for each hazardous chemical the other employer(s)' employees may be exposed to while working;

..1910.1200(e)(2)(ii)

1910.1200(e)(2)(ii)

The methods the employer will use to inform the other employer(s) of any precautionary measures that need to be taken to protect employees during the workplace's normal operating conditions and in foreseeable emergencies; and,

1910.1200(e)(2)(iii)

The methods the employer will use to inform the other employer(s) of the labeling system used in the workplace.

1910.1200(e)(3)

The employer may rely on an existing hazard communication program to comply with these requirements, provided that it meets the criteria established in this paragraph (e).

1910.1200(e)(4)

The employer shall make the written hazard communication program available, upon request, to employees, their designated representatives, the Assistant Secretary and the Director, in accordance with the requirements of 29 CFR 1910.1020 (e).

1910.1200(e)(5)

Where employees must travel between workplaces during a workshift, i.e., their work is carried out at more than one geographical location, the written hazard communication program may be kept at the primary workplace facility.

1910.1200(f)

"Labels and other forms of warning."

1910.1200(f)(1)

The chemical manufacturer, importer, or distributor shall ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged or marked with the following information:

..1910.1200(f)(1)(i)

1910.1200(f)(1)(i)
Identity of the hazardous chemical(s);

1910.1200(f)(1)(ii)

Appropriate hazard warnings; and

1910.1200(f)(1)(iii)

Name and address of the chemical manufacturer, importer, or other responsible party.

1910.1200(f)(2)

1910.1200(f)(2)(i)

For solid metal (such as a steel beam or a metal casting), solid wood, or plastic items that are not exempted as articles due to their downstream use, or shipments of whole grain, the required label may be transmitted to the customer at the time of the initial shipment, and need not be included with subsequent shipments to the same employer unless the information on the label changes;

1910.1200(f)(2)(ii)

The label may be transmitted with the initial shipment itself, or with the material safety data sheet that is to be provided prior to or at the time of the first shipment; and,

1910.1200(f)(2)(iii)

This exception to requiring labels on every container of hazardous chemicals is only for the solid material itself, and does not apply to hazardous chemicals used in conjunction with, or known to be present with, the material and to which employees handling the items in transit may be exposed (for example, cutting fluids or pesticides in grains).

1910.1200(f)(3)

Chemical manufacturers, importers, or distributors shall ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged, or marked in accordance with this section in a manner which does not conflict with the requirements of the Hazardous Materials Transportation Act (49 U.S.C. 1801 et seq.) and regulations issued under that Act by the Department of Transportation.

1910.1200(f)(4)

If the hazardous chemical is regulated by OSHA in a substance-specific health standard, the chemical manufacturer, importer, distributor or employer shall ensure that the labels or other forms of warning used are in accordance with the requirements of that standard.

1910.1200(f)(5)

Except as provided in paragraphs (f)(6) and (f)(7) of this section, the employer shall ensure that each container of hazardous chemicals in the workplace is labeled, tagged or marked
with the following information:

1910.1200(f)(5)(i)
Identity of the hazardous chemical(s) contained therein; and,

1910.1200(f)(5)(ii)
Appropriate hazard warnings, or alternatively, words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the hazard communication program, will provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.

1910.1200(f)(6)
The employer may use signs, placards, process sheets, batch tickets, operating procedures, or other such written materials in lieu of affixing labels to individual stationary process containers, as long as the alternative method identifies the containers to which it is applicable and conveys the information required by paragraph (f)(5) of this section to be on a label. The written materials shall be readily accessible to the employees in their work area throughout each work shift.

1910.1200(f)(7)
The employer is not required to label portable containers into which hazardous chemicals are transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer. For purposes of this section, drugs which are dispensed by a pharmacy to a health care provider for direct administration to a patient are exempted from labeling.

1910.1200(f)(8)
The employer shall not remove or deface existing labels on incoming containers of hazardous chemicals, unless the container is immediately marked with the required information.

1910.1200(f)(9)
The employer shall ensure that labels or other forms of warning are legible, in English, and prominently displayed on the container, or readily available in the work area throughout each work shift. Employers having employees who speak other languages may add the information in their language to the material presented, as long as the information is presented in English as well.

1910.1200(f)(10)
The chemical manufacturer, importer, distributor or employer need not affix new labels to comply with this section if existing labels already convey the required information.
Chemical manufacturers, importers, distributors, or employers who become newly aware of any significant information regarding the hazards of a chemical shall revise the labels for the chemical within three months of becoming aware of the new information. Labels on containers of hazardous chemicals shipped after that time shall contain the new information. If the chemical is not currently produced or imported, the chemical manufacturer, importers, distributor, or employer shall add the information to the label before the chemical is shipped or introduced into the workplace again.

"Material safety data sheets."

Chemical manufacturers and importers shall obtain or develop a material safety data sheet for each hazardous chemical they produce or import. Employers shall have a material safety data sheet in the workplace for each hazardous chemical which they use.

Each material safety data sheet shall be in English (although the employer may maintain copies in other languages as well), and shall contain at least the following information:

The identity used on the label, and, except as provided for in paragraph (i) of this section on trade secrets:

If the hazardous chemical is a single substance, its chemical and common name(s);

If the hazardous chemical is a mixture which has been tested as a whole to determine its hazards, the chemical and common name(s) of the ingredients which contribute to these known hazards, and the common name(s) of the mixture itself; or,

If the hazardous chemical is a mixture which has not been tested as a whole:

The chemical and common name(s) of all ingredients which have been determined to be health hazards, and which comprise 1% or greater of the composition, except that chemicals identified as carcinogens under paragraph (d) of this section shall be listed if the
concentrations are 0.1% or greater; and,

1910.1200(g)(2)(i)(C)(2)

The chemical and common name(s) of all ingredients which have been determined to be health hazards, and which comprise less than 1% (0.1% for carcinogens) of the mixture, if there is evidence that the ingredient(s) could be released from the mixture in concentrations which would exceed an established OSHA permissible exposure limit or ACGIH Threshold Limit Value, or could present a health risk to employees; and,

1910.1200(g)(2)(i)(C)(3)

The chemical and common name(s) of all ingredients which have been determined to present a physical hazard when present in the mixture;

1910.1200(g)(2)(ii)

Physical and chemical characteristics of the hazardous chemical (such as vapor pressure, flash point);

1910.1200(g)(2)(iii)

The physical hazards of the hazardous chemical, including the potential for fire, explosion, and reactivity;

1910.1200(g)(2)(iv)

The health hazards of the hazardous chemical, including signs and symptoms of exposure, and any medical conditions which are generally recognized as being aggravated by exposure to the chemical;

1910.1200(g)(2)(v)

The primary route(s) of entry;

.1910.1200(g)(2)(vi)

1910.1200(g)(2)(vi)

The OSHA permissible exposure limit, ACGIH Threshold Limit Value, and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the material safety data sheet, where available;

1910.1200(g)(2)(vii)

Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Annual Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions), or by OSHA;

1910.1200(g)(2)(viii)

Any generally applicable precautions for safe handling and use which are known to the
chemical manufacturer, importer or employer preparing the material safety data sheet, including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for clean-up of spills and leaks;

1910.1200(g)(2)(ix)

Any generally applicable control measures which are known to the chemical manufacturer, importer or employer preparing the material safety data sheet, such as appropriate engineering controls, work practices, or personal protective equipment;

1910.1200(g)(2)(x)

Emergency and first aid procedures;

1910.1200(g)(2)(xi)

The date of preparation of the material safety data sheet or the last change to it; and,

1910.1200(g)(2)(xii)

The name, address and telephone number of the chemical manufacturer, importer, employer or other responsible party preparing or distributing the material safety data sheet, who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

1910.1200(g)(3)

If no relevant information is found for any given category on the material safety data sheet, the chemical manufacturer, importer or employer preparing the material safety data sheet shall mark it to indicate that no applicable information was found.

1910.1200(g)(4)

Where complex mixtures have similar hazards and contents (i.e. the chemical ingredients are essentially the same, but the specific composition varies from mixture to mixture), the chemical manufacturer, importer or employer may prepare one material safety data sheet to apply to all of these similar mixtures.

1910.1200(g)(5)

The chemical manufacturer, importer or employer preparing the material safety data sheet shall ensure that the information recorded accurately reflects the scientific evidence used in making the hazard determination. If the chemical manufacturer, importer or employer preparing the material safety data sheet becomes newly aware of any significant information regarding the hazards of a chemical, or ways to protect against the hazards, this new information shall be added to the material safety data sheet within three months. If the chemical is not currently being produced or imported the chemical manufacturer or importer shall add the information to the material safety data sheet before the chemical is introduced into the workplace again.
Chemical manufacturers or importers shall ensure that distributors and employers are provided an appropriate material safety data sheet with their initial shipment, and with the first shipment after a material safety data sheet is updated;

The chemical manufacturer or importer shall either provide material safety data sheets with the shipped containers or send them to the distributor or employer prior to or at the time of the shipment;

If the material safety data sheet is not provided with a shipment that has been labeled as a hazardous chemical, the distributor or employer shall obtain one from the chemical manufacturer or importer as soon as possible; and,

The chemical manufacturer or importer shall also provide distributors or employers with a material safety data sheet upon request.

Distributors shall ensure that material safety data sheets, and updated information, are provided to other distributors and employers with their initial shipment and with the first shipment after a material safety data sheet is updated;

The distributor shall either provide material safety data sheets with the shipped containers, or send them to the other distributor or employer prior to or at the time of the shipment;

Retail distributors selling hazardous chemicals to employers having a commercial account shall provide a material safety data sheet to such employers upon request, and shall post a sign or otherwise inform them that a material safety data sheet is available;

Wholesale distributors selling hazardous chemicals to employers over-the-counter may also provide material safety data sheets upon the request of the employer at the time of the over-the-counter purchase, and shall post a sign or otherwise inform such employers that a
material safety data sheet is available;

1910.1200(g)(7)(v)

If an employer without a commercial account purchases a hazardous chemical from a retail distributor not required to have material safety data sheets on file (i.e., the retail distributor does not have commercial accounts and does not use the materials), the retail distributor shall provide the employer, upon request, with the name, address, and telephone number of the chemical manufacturer, importer, or distributor from which a material safety data sheet can be obtained;

1910.1200(g)(7)(vi)

Wholesale distributors shall also provide material safety data sheets to employers or other distributors upon request; and,

1910.1200(g)(7)(vii)

Chemical manufacturers, importers, and distributors need not provide material safety data sheets to retail distributors that have informed them that the retail distributor does not sell the product to commercial accounts or open the sealed container to use it in their own workplaces.

1910.1200(g)(8)

The employer shall maintain in the workplace copies of the required material safety data sheets for each hazardous chemical, and shall ensure that they are readily accessible during each work shift to employees when they are in their work area(s). (Electronic access, microfiche, and other alternatives to maintaining paper copies of the material safety data sheets are permitted as long as no barriers to immediate employee access in each workplace are created by such options.)

1910.1200(g)(9)

Where employees must travel between workplaces during a workshift, i.e., their work is carried out at more than one geographical location, the material safety data sheets may be kept at the primary workplace facility. In this situation, the employer shall ensure that employees can immediately obtain the required information in an emergency.

1910.1200(g)(10)

Material safety data sheets may be kept in any form, including operating procedures, and may be designed to cover groups of hazardous chemicals in a work area where it may be more appropriate to address the hazards of a process rather than individual hazardous chemicals. However, the employer shall ensure that in all cases the required information is provided for each hazardous chemical, and is readily accessible during each work shift to employees when they are in in their work area(s).
Material safety data sheets shall also be made readily available, upon request, to designated representatives and to the Assistant Secretary, in accordance with the requirements of 29 CFR 1910.1020(e). The Director shall also be given access to material safety data sheets in the same manner.

.. 1910.1200(h)

1910.1200(h)

"Employee information and training."

1910.1200(h)(1)

Employers shall provide employees with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new physical or health hazard the employees have not previously been trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (e.g., flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and material safety data sheets.

1910.1200(h)(2)

"Information." Employees shall be informed of:

1910.1200(h)(2)(i)

The requirements of this section;

1910.1200(h)(2)(ii)

Any operations in their work area where hazardous chemicals are present; and,

1910.1200(h)(2)(iii)

The location and availability of the written hazard communication program, including the required list(s) of hazardous chemicals, and material safety data sheets required by this section.

1910.1200(h)(3)

"Training." Employee training shall include at least:

1910.1200(h)(3)(i)

Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);

1910.1200(h)(3)(ii)

The physical and health hazards of the chemicals in the work area;
The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and,

The details of the hazard communication program developed by the employer, including an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information.

"Trade secrets."

The chemical manufacturer, importer, or employer may withhold the specific chemical identity, including the chemical name and other specific identification of a hazardous chemical, from the material safety data sheet, provided that:

The claim that the information withheld is a trade secret can be supported;

Information contained in the material safety data sheet concerning the properties and effects of the hazardous chemical is disclosed;

The material safety data sheet indicates that the specific chemical identity is being withheld as a trade secret; and,

The specific chemical identity is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of this paragraph.

Where a treating physician or nurse determines that a medical emergency exists and the specific chemical identity of a hazardous chemical is necessary for emergency or first-aid treatment, the chemical manufacturer, importer, or employer shall immediately disclose the specific chemical identity of a trade secret chemical to that treating physician or nurse, regardless of the existence of a written statement of need or a confidentiality agreement. The
chemical manufacturer, importer, or employer may require a written statement of need and confidentiality agreement, in accordance with the provisions of paragraphs (i)(3) and (4) of this section, as soon as circumstances permit.

1910.1200(i)(3)

In non-emergency situations, a chemical manufacturer, importer, or employer shall, upon request, disclose a specific chemical identity, otherwise permitted to be withheld under paragraph (i)(1) of this section, to a health professional (i.e. physician, industrial hygienist, toxicologist, epidemiologist, or occupational health nurse) providing medical or other occupational health services to exposed employee(s), and to employees or designated representatives, if:

1910.1200(i)(3)(i)
The request is in writing;

1910.1200(i)(3)(ii)
The request describes with reasonable detail one or more of the following occupational health needs for the information:

1910.1200(i)(3)(ii)(A)
To assess the hazards of the chemicals to which employees will be exposed;

1910.1200(i)(3)(ii)(B)
To conduct or assess sampling of the workplace atmosphere to determine employee exposure levels;

1910.1200(i)(3)(ii)(C)
To conduct pre-assignment or periodic medical surveillance of exposed employees;

1910.1200(i)(3)(ii)(D)
To provide medical treatment to exposed employees;

1910.1200(i)(3)(ii)(E)
To select or assess appropriate personal protective equipment for exposed employees;

1910.1200(i)(3)(ii)(F)
To design or assess engineering controls or other protective measures for exposed employees; and,

1910.1200(i)(3)(ii)(G)
To conduct studies to determine the health effects of exposure.
The request explains in detail why the disclosure of the specific chemical identity is essential and that, in lieu thereof, the disclosure of the following information to the health professional, employee, or designated representative, would not satisfy the purposes described in paragraph (i)(3)(ii) of this section:

- The properties and effects of the chemical;
- Measures for controlling workers' exposure to the chemical;
- Methods of monitoring and analyzing worker exposure to the chemical; and,
- Methods of diagnosing and treating harmful exposures to the chemical;

The request includes a description of the procedures to be used to maintain the confidentiality of the disclosed information; and,

The health professional, and the employer or contractor of the services of the health professional (i.e. downstream employer, labor organization, or individual employee), employee, or designated representative, agree in a written confidentiality agreement that the health professional, employee, or designated representative, will not use the trade secret information for any purpose other than the health need(s) asserted and agree not to release the information under any circumstances other than to OSHA, as provided in paragraph (i)(6) of this section, except as authorized by the terms of the agreement or by the chemical manufacturer, importer, or employer.

The confidentiality agreement authorized by paragraph (i)(3)(iv) of this section:

- May restrict the use of the information to the health purposes indicated in the written statement of need;
- May provide for appropriate legal remedies in the event of a breach of the agreement,
including stipulation of a reasonable pre-estimate of likely damages; and,

1910.1200(i)(4)(iii)

May not include requirements for the posting of a penalty bond.

1910.1200(i)(5)

Nothing in this standard is meant to preclude the parties from pursuing non-contractual remedies to the extent permitted by law.

1910.1200(i)(6)

If the health professional, employee, or designated representative receiving the trade secret information decides that there is a need to disclose it to OSHA, the chemical manufacturer, importer, or employer who provided the information shall be informed by the health professional, employee, or designated representative prior to, or at the same time as, such disclosure.

..1910.1200(i)(7)

1910.1200(i)(7)

If the chemical manufacturer, importer, or employer denies a written request for disclosure of a specific chemical identity, the denial must:

1910.1200(i)(7)(i)

Be provided to the health professional, employee, or designated representative, within thirty days of the request;

1910.1200(i)(7)(ii)

Be in writing;

1910.1200(i)(7)(iii)

Include evidence to support the claim that the specific chemical identity is a trade secret;

1910.1200(i)(7)(iv)

State the specific reasons why the request is being denied; and,

1910.1200(i)(7)(v)

Explain in detail how alternative information may satisfy the specific medical or occupational health need without revealing the specific chemical identity.

1910.1200(i)(8)

The health professional, employee, or designated representative whose request for information is denied under paragraph (i)(3) of this section may refer the request and the written denial of the request to OSHA for consideration.
When a health professional, employee, or designated representative refers the denial to OSHA under paragraph (i)(8) of this section, OSHA shall consider the evidence to determine if:

1910.1200(i)(9)(i)

The chemical manufacturer, importer, or employer has supported the claim that the specific chemical identity is a trade secret;

1910.1200(i)(9)(ii)

The health professional, employee, or designated representative has supported the claim that there is a medical or occupational health need for the information; and,

1910.1200(i)(9)(iii)

The health professional, employee or designated representative has demonstrated adequate means to protect the confidentiality.

1910.1200(i)(10)

If OSHA determines that the specific chemical identity requested under paragraph (i)(3) of this section is not a "bona fide" trade secret, or that it is a trade secret, but the requesting health professional, employee, or designated representative has a legitimate medical or occupational health need for the information, has executed a written confidentiality agreement, and has shown adequate means to protect the confidentiality of the information, the chemical manufacturer, importer, or employer will be subject to citation by OSHA.

1910.1200(i)(10)(ii)

If a chemical manufacturer, importer, or employer demonstrates to OSHA that the execution of a confidentiality agreement would not provide sufficient protection against the potential harm from the unauthorized disclosure of a trade secret specific chemical identity, the Assistant Secretary may issue such orders or impose such additional limitations or conditions upon the disclosure of the requested chemical information as may be appropriate to assure that the occupational health services are provided without an undue risk of harm to the chemical manufacturer, importer, or employer.

1910.1200(i)(11)

If a citation for a failure to release specific chemical identity information is contested by the chemical manufacturer, importer, or employer, the matter will be adjudicated before the Occupational Safety and Health Review Commission in accordance with the Act's enforcement scheme and the applicable Commission rules of procedure. In accordance with
the Commission rules, when a chemical manufacturer, importer, or employer continues to withhold the information during the contest, the Administrative Law Judge may review the citation and supporting documentation "in camera" or issue appropriate orders to protect the confidentiality of such matters.

1910.1200(i)(12)

Notwithstanding the existence of a trade secret claim, a chemical manufacturer, importer, or employer shall, upon request, disclose to the Assistant Secretary any information which this section requires the chemical manufacturer, importer, or employer to make available. Where there is a trade secret claim, such claim shall be made no later than at the time the information is provided to the Assistant Secretary so that suitable determinations of trade secret status can be made and the necessary protections can be implemented.

1910.1200(i)(13)

Nothing in this paragraph shall be construed as requiring the disclosure under any circumstances of process or percentage of mixture information which is a trade secret.

.1910.1200(j)

1910.1200(j)

"Effective dates." Chemical manufacturers, importers, distributors, and employers shall be in compliance with all provisions of this section by March 11, 1994.

Note: The effective date of the clarification that the exemption of wood and wood products from the Hazard Communication standard in paragraph (b)(6)(iv) only applies to wood and wood products including lumber which will not be processed, where the manufacturer or importer can establish that the only hazard they pose to employees is the potential for flammability or combustibility, and that the exemption does not apply to wood or wood products which have been treated with a hazardous chemical covered by this standard, and wood which may be subsequently sawed or cut generating dust has been stayed from March 11, 1994 to August 11, 1994.

MATERIAL SAFETY DATA SHEETS (MSDS) ARE MAINTAINED BY THE INDIVIDUAL DEPARTMENTS BASED ON THEIR INVENTORY OF POTENTIALLY HAZARDOUS MATERIALS.