



HAZARD COMMUNICATION PROGRAM

PREPARED BY ENVIRONMENTAL HEALTH AND SAFETY OFFICE

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PURPOSE

To provide guidance and direction for the dissemination of necessary and required information such that employees will be aware of the hazardous chemicals in the workplace and methods available to prevent or reduce exposure to the potential hazards they present.

BACKGROUND

The North Carolina Department of Labor has also adopted the revised federal Occupational Safety and Health Administration (OSHA) Hazard Communication Standard commonly referred to as the “Globally Harmonized System of Classification and Labeling of Chemicals (“GHS”), with an effective date of June 11, 2012. In this 2012 rule, OSHA modified its Hazard Communication Standard to conform to the United Nations’ GHS, Revision 3. The final effective date for compliance with the entire revised standard is June 1, 2016.

SCOPE

The requirements of this document apply to all Davidson College employees who, in the normal course of their work or during a foreseeable emergency situation, could possibly be exposed to or come in contact with a hazardous chemical. The program includes the following components:

- Safety Data Sheets (SDS)
- Material Safety Data Sheets (MSDS)
- Labeling
- Employee Training
- Written Plan
- Chemical Inventory via CHIMERA

Laboratory areas are exempt from this program, provided they are in full compliance with Davidson College Chemical Hygiene Plan.

RESPONSIBILITIES

The success of the Hazard Communication Program depends upon the cooperation of every employee.

The Environmental Health and Safety Manager (EHS) is the technical resource for all operations related to hazardous chemicals/materials and the CHIMERA administrator.

Each Department Manager is responsible for maintaining the master chemical inventory list on CHIMERA and evaluating that inventory at least annually. The Departmental Managers are also responsible for managing, ensuring compliance, providing corrective action for deficiencies, maintaining an effective hazard communication training program, and implementation of these requirements within their organizations.

Supervisors (or equivalent) have the direct field responsibility for enforcement, specific chemical hazard communication training, ensuring up-to-date MSDS/SDSs are readily available, ensuring chemicals are properly stored and labeled.

DEFINITIONS

CHIMERA: The computerized chemical inventory system used at Davidson College. The chemical inventory in CHIMERA is maintained by affixing bar code labels on primary containers. CHIMERA also furnishes MSDS/SDS and hazard information for all chemicals.

Employee: A worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies.

Hazardous chemical: Any chemical which is a physical or health hazard. This definition also applies to asbestos, a hazardous fibrous silicate mineral.

Hazard classification: To identify the relevant data regarding the hazards of the chemical and determining the degree of health and physical hazard of the substance.

Health hazard: A chemical which is classified as posing one of the following hazardous effects; acute toxicity; skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific organ toxicity; or aspiration hazard.

Label: Any written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals.

Safety Data Sheet (SDS): Written or printed material concerning a hazardous

chemical which contains the manufacturer's information, the hazardous ingredients, the physical and health data, fire and explosion data, reactivity data, spill or leak procedures, personal protection necessary, and/or any special precautions.

Physical hazard: 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.

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

HAZARD CLASSIFICATION

Chemical manufacturers and importers are required to evaluate chemicals produced in their workplaces or imported and to classify the chemicals based on potential health and physical hazards in accordance with specific guidelines outlined in the OSHA Hazard Communication Standard. The hazard classifications assigned to the chemical substances are communicated through information on product labels and the MSDS/SDS. Employees should follow the chemical hazard classification outlined by the product manufacturer. Please contact the EHS Office for assistance in determining the classification of any chemical mixture.

HAZARDOUS CHEMICAL INVENTORY LIST

Each Department Manager or designee shall generate and maintain a current chemical inventory by using the CHIMERA system. This list shall be reviewed at least annually (in March). CHIMERA can be accessed by the following link:

<https://rms.unlv.edu/chimera/davidson/>

Any employee who has questions about the chemical inventory list should contact their immediate supervisor.

MATERIAL SAFETY DATA SHEETS (MSDS) & SAFETY DATA SHEETS (SDS)

Each Davidson Department Manager or designee shall ensure that SDSs are readily accessible to employees.

Note: At no time and under no circumstances will an employee or contractor be denied access to a MSDS/SDS. Employees should not be allowed to use any chemical for which a MSDS/SDS is not available.

The MSDS/SDS file shall be accessed electronically via CHIMERA and is

always accessible to the employee(s). The inventory on file in CHIMERA is quite comprehensive and should be the first source to locate MSDS/SDS. This CHIMERA MSDS/SDS inventory is available to everyone at Davidson, does not require user authorization/training and can be accessed by the following link: <https://rms.unlv.edu/msds/>

If the appropriate SDS cannot be retrieved using CHIMERA, please consult the manufacturers SDS master list of links in Appendix 1.

An MSDS/SDS that meets the requirements of OSHA Hazard Communication Standard 29 CFR 1910.1200 (g) shall be maintained using CHIMERA for each item listed on the department's Chemical Inventory.

Some chemical manufacturers maintain that a MSDS/SDS are not required and will not furnish them. In these instances, the chemical manufacturers will generally provide a letter clarifying why a MSDS/SDS does not have to be supplied (e.g. proprietary or unknown ingredients). This documentation should be retained and a decision on whether to use this chemical manufacturer shall be made after conferring with the EHS Manager.

LABELS AND OTHER FORMS OF WARNING

All hazardous chemicals are required to be properly labeled unless they are exempt by the OSHA standard. OSHA either exempts or does require labeling for certain hazardous chemicals that are covered under other regulations. These chemicals are those regulated by the: Toxic Substances Control Act (TSCA); Food, Drug and Cosmetics Act (FDA); spirits; and consumer products. OSHA also exempts portable containers that are intended for the immediate use by the employee performing the transfer.

If hazardous chemicals are not exempt or covered under other regulations, labels are required.

The primary purchase hazardous chemical containers must be labeled with a numerical chemical resistant bar code label for use with CHIMERA. Each label must have a unique sequential number. Additionally, primary and secondary containers should have the following hazard communication information:

- Product Identifier/Name
- Supplier Identification/Name
- Precautionary Statement
- Hazard Pictograms

- Signal Word “Danger” “Caution”

Vials and other small containers can be difficult to label, because of their size. In this instances, place these items in test tube racks, boxes or other containers and label. Labeling a shelf where these chemicals are located is also possible, however any hazardous chemical removed that does not have a full chemical name must remain under supervision.

The Departmental Manager or designee shall ensure workplace labels or other forms of warning are legible, in good condition, in English and prominently displayed on the container or readily available in the work area.

STANDARD OPERATING PROCEDURES (SOPs)

Each Department Manager or designee shall evaluate the use of chemicals to determine the potential hazards associated with the work. This hazard evaluation must include the chemical or combination of chemicals that will be used in the work, as well as other materials that will be used near the work. If any job function has the potential to cause serious injury, property damage and/or is “determined or deemed” a non-routine task set of Standard Operating Procedures (SOPs) must be generated.

SOPs shall address all non-routine tasks performed by the department or work group in question that involves potentially hazardous chemicals/materials and/or situations.

All SOPs shall contain, at a minimum, the following information:

- A concise step-by-step set of instructions on how to perform the task in question.
- Statements of the potential hazards involved.
- Required engineering/administrative controls and/or personal protective equipment to prevent or reduce potential exposures or injuries to a minimum.

All SOPs must be approved by the EHS Office prior to implementation. Employees shall receive instructions on applicable SOPs prior to their assignment to that particular task.

Each Department Manager or designee shall review their SOP files if any, for completeness and accuracy on at least an annual basis.

No task having the potential to cause serious injury, property damage

and/or a non-routine task shall be assigned to any employee prior to the generation and approval of an SOP for that task.

CONTRACTORS

All contractors should adhere to this program while under the supervision of Davidson employees

TRAINING

Employees working with hazardous chemicals shall receive documented initial hazard communication training. Refresher training is required whenever a new physical or health hazard is introduced into the work area, not merely the addition of a new chemical. Additionally, departmental managers, faculty, laboratory/stockroom managers and other key stakeholders involved with maintaining chemical inventory will receive training with CHIMERA as needed.

The hazard training shall consist of the following:

- Explanation of the Hazard Communication Standard 1910.1200.
- Discussions of operations where hazardous chemicals are located using CHIMERA.
- The location and availability of the written Hazard Communication program, including the required list of hazardous chemicals, explanation of labels received on shipped containers, materials safety data sheets (MSDS), safety data sheets (SDS) and how employees can use the hazard information.
- Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area.
- The physical, health, simple asphyxiation, combustible dust and pyrophoric gas hazards as well as hazards not otherwise classified of the chemical in the work area.
- The measures employees can take to protect themselves from these hazards, including specific procedures implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.

CHIMERA chemical inventory training shall include the entry of chemicals into the inventory, affixation of bar code labels, generation of reports, inventory

review, use of bar code scanners, etc. Once training is successfully completed, the CHIMERA administrator (EHS Manager) shall grant user authorization based on job responsibility. All requests for CHIMERA training should be directed to the EHS Manager.

In addition to initial general hazard communication training, it is the responsibility of the supervisor to provide training for specific chemicals used or stored in the work location and whenever a new chemical hazard is introduced. This training must be documented and retained.

RECORDKEEPING

MDSD/SDS shall be retained for a period of thirty (30) years.

Employee training records shall be documented and retained indefinitely.

Appendix 1

SDS Master List

Company Name	SDS Website
3M	http://www.3m.com/3M/en_US/company-us/SDS-search/
Ace Hardware	http://www.acehardware.com/shop/index.jsp?categoryId=3929673
AGS	http://agscompany.com/resources/msds-sheets/
Akzonobel	http://sds.basc.akzonobel.com/SDS/action/search/search_index.jsp?P_SYS=1&P_LANGU=E
Amsoil	http://www.amsoil.com/msds/
Ashland	https://msds.ashland.com/
Atlantic Chemical (ACE)	http://www.atlanticchemical.com/msds.php
Bayer	http://www.backedbybayer.com/
Benefect	http://www.benefect.com/US/documents.php
Betco	http://www.betco.com/sds
Big D Industries	http://www.bigdind.com/product.aspx?id=BigD39
Black Swan Mfg	http://www.blackswanmfg.com/index.php/material-safety-data-sheets/124-msds-alphabetical-list/746-msds-alphabetical-list
Bona	https://us.bona.com/lines/hardwood-floor-cleaners.html
Bonide	http://www.bonide.com/products/applicators/view/097/turbo-spreader-sticker
Bright Dyes	http://www.brightdyes.com/MSDS.html
Bright Dyes	http://www.brightdyes.com/MSDS.html
Buckeye International	http://www.buckeyeinternational.com/support/msds/
Bug Band	http://bugband.net/safety-data-sheets.html
Carquest Auto Parts	http://carquestprofessionals.com/msds.html
CDMS	http://www.cdms.net/LabelsSDS/home/manidx?keys=108
CFR Corp	http://www.cfrcorp.com/Resources/sds.aspx
Clean-Rite	http://www.clean-rite.com/purplepower_industrial_strength_cleaner_degreaser.html
Clift Industries	http://cliftindustries.com/sds-sheets/
Clorox	https://www.thecloroxcompany.com/products/sds/
Colgate	http://www.colgatecommercial.com/SDS-Sheets.aspx
Colgate Palmolive	http://www.colgatecommercial.com/SDS-Sheets.aspx
CPC Aeroscience	http://www.cpaeroscience.com/content/sds-safety-data-sheets
CRC Industries	http://crcindustries.com/auto/safety-data-sheets
Cutter	http://www.cutterinsectrepellents.com/Custom-Help/Labels-and-MSDS.aspx
DAP	https://www.dap.com/media/52676/00010420001english.pdf
DEB Group	http://www.debgroup.com/us/msds
Dow	http://www.dow.com/webapps/msds/msdssearch.aspx
Dupli Color	http://www.duplicolor.com/search/?search=msds
Dynamic Research Co.	http://www.dynamicresearchcompany.com/products/msds/
Eclectic Products	http://eclecticproducts.com/products.html
Ecolab	http://portal.ecolab.com/wps/portal/msds/
Ecolab	http://www.ecolab.com/pages/sds
Enviroxclean	http://www.enviroxclean.com/all-sds/
Fisher Scientific	https://www.fishersci.com/us/en/catalog/search/sdshome?showMSDSsearch=Y&storeId=10652
GE Sealants	http://www.siliconeforbuilding.com/document-weatherseal
Gojo	http://www.gojo.com/united-states/brands/purell/msds.aspx?sc_lang=en
Goo Gone	http://googone.com/MSDS/MSDS.aspx
Haskell Corp.	http://www.haskellcorp.com/Safety/SDS.aspx
Hillyard	http://www.hillyard.com/_catalogs/masterpage/HillyardMasterV1/HillyardApps/MSDS.aspx
Honeywell	http://www.honeywellsds.com/ehswww/external/search/search_index.jsp?P_LANGU=E&P_SYS=1
Husqvarna	http://www.husqvarna.com/us/construction/service/material-safety-data-sheet/
Ideal Industries	http://www.idealindustries.ca/support/msds/
Impact Products	http://www.impact-products.com/resource-library.html
Ingersoll Rand	http://www.ingersollrandproducts.com/am-en/support/manuals-and-technical-publications/msds-tools-and-lifting-material-handling
ITW Polymers Sealants	http://www.itwtacc.com/regulatory_information/msds.cfm
ITW Professional Brands	http://itwprofessionalbrands.com/dymon-literature.php?id=1177
Jasco	http://www.jasco-help.com/msds-cpsia
Kano Labs	http://www.kanolabs.com/msdsInfo.html
Kelly Solutions (see DOW)	http://www.dow.com/webapps/msds/msdssearch.aspx

Company Name	SDS Website
Kelsan	http://www.kelsan.biz/status-fulfillment/msds/
Kik Corp	http://www.kikcorp.com/msds/
LA-CO	http://www.laco.com/sds/
Lawson Products	http://www.lawsonproducts.com/msds/msds-search.jsp
Loctite	http://www.loctiteproducts.com/techdata-msds.shtml
LPS Labs	http://www.lpslabs.com/product-downloads
Midlab	http://www.midlab.com/msds/
My Bright Solutions	http://www.mybrightsolutions.com/shop/
Mystiklubes	https://www.mystiklubes.com/media/SDS/greases.jsp
NAPA	http://www.napaonline.com/default.aspx
National Gypsum	http://nationalgypsum.com/products/product.aspx?doctype=SDS
NCL	http://www.nclonline.com/products/msds_alpha
NCL	http://www.nclonline.com/products/msds_alpha
Newell Rubbermaid	http://msdsop.newellrubbermaid.com/Pages/MsdsSearch.aspx
NR Products	http://www.nrproducts.com/msds.htm
Nu Calgon	http://www.nucalgon.com/msds
Oatey	http://www.oatey.com/technical-info/msds/
PPG Porter Paints	http://www.ppgporterpaints.com/msds?msds-search=&submit-msds=Search
Prang	http://www.prang.com/art/paints/paints/ready-to-use-tempera
Prochem	http://www.prochem.com/materialsafety.aspx?AspxAutoDetectCookieSupport=1
Proctor & Gamble Pro	http://www.pgpro.com/msds
Quikrete	http://www.quikrete.com/OnTheJob/SpecData.asp
RCS Chemical Solutions	http://www.rsbrands.com/products/msds.asp
Reckitt Professional	http://www.reckittprofessional.com/customer_services/msds/product/
Rectorseal	http://www.rectorseal.com/index.php/msds/
Red Devil	https://www.reddevil.com/index.php?l=page_view&p=tech_docs
Refrigeration Technologies	http://www.refrigtech.com/SDS/SDS.html
Rustoleum	http://www.rustoleumwood.com/techdocs.asp
Scotts	http://www.scottsmsds.com/
Seymour Paint	http://www.seymourpaint.com/msdstds/
Shaw Hard Surface	http://www.shawhardsurface.com/
Sigma-Aldrich	http://www.sigmaaldrich.com/safety-center.html
Spartan Chemical	https://www.spartanchemical.com/msds_sds/
State Industrial	http://stateindustrial.com/content/state-industrial-msds
Triple SSS	http://www.triple-s.com/msds_top.htm
Unelko Corp	http://www.sanishieldproducts.com/our-products.html
USG	https://www.usg.com/content/usgcom/en/products-solutions/products/finishes/joint-compounds/sheetrockbrandallpurposejointcompound.html
Webpirs	https://webpirs.nch.com/MSDS/MSDSSearch.aspx?CO=CL&CN=USA&ln=en
Wepak	http://www.buckeyeinternational.com/sds
Worthington Industries	http://worthingtonindustries.com/Resources/For-Customers/Safety-Data-Sheets
WWG Totaline	http://wwgtotaline.ca/en/msds/
Zep Distribution	http://www.zepdistribution.com/brands/zep-professional/sds