

# National High Magnetic Field Laboratory Safety Program

TITLE: Hazard Communication Program	SUBJECT: Hazard Communication
PROGRAM NUMBER: SP-20	<b>EFFECTIVE DATE:</b> 10/2/2009
<b>REVISION NUMBER:</b> 002	<b>REVISION DATE:</b> 8/10/18
ISSUING AUTHORITY: Safety & Admin	APPROVAL: NHMFL Deputy Lab Director
Additional Approval Signatures on Revision and Approval Page	

#### **Overall Mission and Overview:**

The National High Magnetic Field Laboratory (NHMFL) Environmental, Health, and Safety (EHS) program's mission is to:

Provide support and guidance to all NHMFL departments with the implementation, maintenance and review of a comprehensive environmental, health, and safety program. The goal of the MagLabs EHS program is to control, reduce or eliminate work-related injuries, illnesses and loss of NHMFL resources.

The NHMFL is charged by the National Science Foundation (NSF) to safely:

- Promote magnet-related research to serve an interdisciplinary scientific user community.
- Provide unique high-magnetic-field facilities through a competitive and transparent proposal review process.
- Advance magnet and magnet-related technology.
- Partner with universities, other national laboratories and industry to enhance national competitiveness in magnet and related technologies.
- Serve the NSF as a prominent example of its successful stewardship of large research facilities.
- Support science and technology education in the United States.
- Increase diversity in the science, technology, engineering, and mathematics workforce.
- Promote collaboration among our three partner institutions: Florida State University (FSU), the University of Florida (UF) and Los Alamos National Laboratory (LANL).



# 1.0 PURPOSE

This Program establishes policy and procedure to be observed by all personnel of the National High Magnetic Field Laboratory (NHMFL) for the purpose of acknowledging that the NHMFL must comply with the Occupational Safety and Health Act (OSHA) Hazard Communication Standard. This includes the compiling of a chemical inventory, the use and maintenance of Safety Data Sheets (SDS's), the maintenance of container labels, and providing all employees with the training necessary under the requirements of the regulations.

The policy of the NHMFL is to provide and maintain a safe and healthful working environment. Employees, users, guests, and visitors shall assist in ensuring that safety is not compromised. The safety and health of all personnel at the NHMFL is the inherent responsibility of each employee, user, management, and all levels of supervision.

### 2.0 <u>SCOPE</u>

This program applies to all work operations at the NHMFL where personnel may be exposed to hazardous substances under normal working conditions or during an emergency situation.

#### 3.0 <u>REFERENCES</u>

Code of Federal Regulations 29 Part 1910.1200

#### 4.0 **RESPONSIBILITIES**

#### PERSONNEL

All personnel, including full and part time employees, users, students, and contractors, shall adhere to the guidance presented in this Program.

The Safety Department has the overall responsibility for the administration of this Program. The Safety Department will review and update this Program as necessary. A written copy of this Program can be provided and a digital version is available.

Under this Program, all personnel will be informed of the contents of the OSHA Hazard Communication Standard (HCS), the hazardous properties of chemicals in the work place, safe handling procedures for workplace hazards associated with chemicals and hazardous materials, the use and maintenance of the SDS system, and the necessary measures to practice to protect themselves from workplace hazards.

### HAZARDOUS MATERIALS INVENTORY

For the purpose of this Program, a hazardous material shall be defined as any substance or



compound that has the capability of producing adverse acute or chronic effects on the health and safety of humans. The Safety Department will compile an inventory of all hazardous materials and chemicals in use, at the NHMFL. An electronic copy of the inventory will be maintained by the Safety Department. The Safety Department will send out an annual reminder to each lab to review and update their inventory.

## CHEMICAL PROCUREMENT

The Safety Department should be contacted prior to ordering a new particularly hazardous substance not currently in a labs chemical inventory. Special regulations apply to the purchase of radioactive materials and biohazardous substances. The Safety Department must be contacted prior to the initial purchase of such substances.

# SAFETY DATA SHEETS (SDS's)

The safety data sheet (SDS), formerly known as a material safety data sheet (MSDS), is a general summary of safety information for a hazardous substance or material. The Occupational Safety and Health Administration (OSHA) requires manufacturers and importers of chemicals to develop an SDS for materials they provide to their customers. It is intended to provide workers and emergency personnel with procedures for handling or working with that substance in a safe manner.

The SDS must include the chemical and common names of all ingredients that have been determined to be health hazards if they constitute 1% or greater of the product's composition (0.1% for carcinogens). The SDS is typically broken into 16 sections which are:

- Identification of the substance/mixture
- Hazards identification
- Composition/information on ingredients
- First aid measures
- Firefighting measures
- Accidental release measures
- Handling and storage
- Exposure controls/personal protection
- Physical and chemical properties
- Stability and reactivity
- Toxicological information
- Ecological information
- Disposal considerations
- Transport information
- Regulatory information
- Other information



Safety data sheets provide specific information on the chemical or material, list the chemical properties of the material, identify personal protective equipment requirements, list safe handling and storage guidelines, and contains other useful information.

The FSU Safety SDS Database can be accessed here: FSU SDS database

Personnel should always avoid any unnecessary chemical exposures and should never rely solely on SDS sheets to understand how to protect themselves from specific chemicals.

When looking for an SDS make sure to consider concentration and grade of the substance in question as this is important when determining the product's safety rating.

It is important to use an SDS specific to both country and supplier, as the same product (e.g. paints sold under identical brand names by the same company) can have different formulations in different countries. The formulation and hazard of a product using a generic name (e.g. sugar soap) may vary between manufacturers in the same country.

### LABELS AND OTHER FORMS OF WARNING

Labels on containers of hazardous materials or chemicals must not be removed or defaced. If materials are transferred from the original container to another approved storage container, all applicable information on the original product label must be transferred to the other container. Product labels for storage containers must contain the chemical name, appropriate hazard warnings, contact information for the manufacturer, and any other useful information. Working containers must be labeled with at least the proper chemical name.

Containers of hazardous materials shipped from the NHMFL must be checked by a certified hazardous materials shipper to ensure that they are properly packaged, labeled, marked, and sealed in compliance with all applicable regulations. Contact the Safety Department for assistance.

#### TRAINING

Any employee, user, visitor, or contractor who works with, or is potentially exposed to, a hazardous material or chemical will receive training on the Hazard Communication Standard under the requirements of this Program. The training program will be administered by the Safety Department and will consist of an online training module. Classroom instruction and hands-on training will be given as needed. The training will be presented to employees upon initial assignment to a work area where there are known hazards, and refresher training will be provided annually or when new hazards are introduced to the work environment. The Safety Department will provide this training and any other assistance in meeting the requirements of this Program.

The training program will emphasize the following:



- Summary of the requirements of the Hazard Communication Standard, the Right-to-Know Act, and this Program.
- How to obtain, read, and understand the information on a SDS.
- The proper labeling requirements for containers.
- Chemical and physical properties of hazardous material (e.g., flashpoint, reactivity) and methods that can be used to detect the presence or release of chemicals.
- The proper use of personal protective equipment (PPE) and devices designed to protect the worker from hazards.

Supervisors or PI's shall provide hands on training to employees and students working in their shops or labs.

# CONTRACTOR EMPLOYEES

The Safety Department, upon notification by the responsible supervisor, will advise outside contractors of the presence of hazards that may be encountered while completing their contracted duties. Also, outside contractors must be made aware of the labeling system in use, the location of SDS and chemical inventory information, the emergency action plan in use (See NHMFL Safety Procedure SP-3, Emergency Action Plan), and areas of high danger, such as high voltage areas, high magnetic fields, and laser control areas. In addition, contractors bringing hazardous materials into the NHMFL must notify the Safety Department and provide the SDS information prior to arrival at the facility. Contractors must not leave any waste materials or products at the NHMFL at the completion of their contracted duties.

### ADDITIONAL INFORMATION

All personnel can obtain further information on this Program including, the Hazard Communication Standard, SDS information, chemical inventory list, training requirements, labeling requirements and any other safety information from the Safety Department.



# **REVISIONS AND APPROVALS:**

# Revisions

Date	<b>Revision</b> #	Section	Description
4/07/08	02	Cover	Names and positions changed to reflect
			current management
4/15/08	02	3.2	Updated to include location of inventory
4/15/08	02	3.3	Notification to safety department required
			prior to ordering hazardous substances
4/15/08	02	3.4	Updated to include location of SDS
8/10/18	03	All	Updated based on GHS, FSU SDS Link and
			removed language covered in SP-24.

#### Approvals

Title	Reviewer	Signature
Associate Director:		
<b>Environmental Health &amp; Safety</b>		