	Effective Date 04/24/2019	Num	Number L 08	
Subject Safety Data Sheet Management and Maintenance				
Reference None	Special In None	structions		
Distribution SOP	<b>Reevalua</b> t Biani	<b>ion Date</b> nual	No. Pages 6	

## I. PURPOSE

This SOP has been developed for any University of Houston-Clear Lake personnel and/or contractor who will be involved in ordering and receiving products that come with SDS's. This process should be followed according to the SOP and result in an efficient manner for cataloging SDS in the Environmental Health and Safety Assistant (EHSA) software application maintained by the EHS Department. All hazard communications representatives, primary investigators, laboratory supervisors, and laboratory technicians must oversee and/or assist in the process.

## II. DEFINITIONS

- A. CAS Number Chemical Abstracts Service Number, also referred to as CAS Registry Number CASRN or CAS Number, is a unique numerical identifier assigned by the Chemical Abstracts Service (CAS) to every chemical substance described in open scientific literature from 1957 through the present
- B. Chemical Catalog SDS Search A module found in EHSA which looks into the chemical catalog associated with our (UHCL) database, and searches for the SDS that are stored in the database catalog
- C. EHS Environmental, Health and Safety Department
- D. EHSA Environmental Health and Safety Assistant, is an online university website application produced by On Site Systems
- E. GHS Globally Harmonized System of Classification and Labeling of Chemicals, developed by the United Nations for hazard communication purposes and adopted by the US
- F. IBC Code International Building Code, is a model building code developed by the International Code Council (ICC). It has been adopted for use as a base code standard by most jurisdictions in the US.
- G. ID Identification
- H. MARPOL short for Marine Pollution, it's the international Convention for the Prevention of Pollution from Ships
- I. MSDS Material Safety Data Sheet, which as of June 1, 2015, are being phased out and replaced with new Safety Data Sheets (SDS)
- J. SDS Safety Data Sheet

- K. SDS Hub A module in found in EHSA which looks to the EHSA cloud service hub and searches for the SDSs available from there, which is likely to have many more SDSs available from it
- L. SOP Standard Operating Procedure
- M. UN United Nations
- N. UHCL University of Houston-Clear Lake
- O. UHCLPD University of Houston-Clear Lake Police Department

## III. PROCEDURES

- A. It will be the hazard communications representatives, primary investigators, laboratory supervisors, and laboratory technicians' responsibility to assist the EHS Department in the management and maintenance of the SDS catalog inventory.
- B. When ordering a new product, always request that the vendor include the SDS with the order.
- C. When receiving any new product from a vendor, locate and remove the SDS from contents.
  - The time span of use and expiration date for each product needs to be recorded.
  - Date stamp the SDS with the date of arrival at UHCL.
  - ii) Cross-reference the revision date on the SDS (located on front page) with the current revision date listed in the Chemical Catalog SDS Search found in EHSA.
    - If both dates are the same, discard the new duplicate SDS.
  - iii) If the SDS is for a new product or has a new revision date for an existing product, the following must happen:
    - Send the SDS to the EHS Department. Indicate the department location (i.e. Building, Room, Storage Location ID), and a contact person associated with the SDS. EHS will add the SDS to the Chemical Catalog SDS Search found in EHSA. On Site will add to the SDS Hub.
- D. The EHS Department will periodically inspect the department SDS catalog for current content and organization.
- E. Archive hardcopies of (M)SDS catalog's will be kept by the EHS Department to be accessible by the UHCLPD in a labeled file cabinet.
- F. The following in "Section G" titled "Sections of the SDS" are the 16 Sections and the content found in the SDS. If anything is not as listed, or if any problems should arise, the EHS Department should be contacted immediately.

## G. Sections of the SDS

## i) Section 1. Product and Company Identification

- GHS Product Identifier
- Other means of identification
- Recommended use of the chemical and restrictions on use
- Supplier's details (including name, address, phone number, etc.)
- Emergency phone number

## ii) Section 2. Hazard Identification

- GHS classification of the substance/mixture and any national or regional information
- GHS label elements, including precautionary statements. (Hazard symbols may be provided as a graphical reproduction of the symbols in the black and white or the name of the symbol e.g. "flame", "skull and crossbones").
- Other hazards which do not result in the classification (e.g. "dust explosion hazard") or are not covered by the GHS.

## iii) Section 3. Composition/Information on Ingredients

- Substance
  - Chemical identity
  - Common name, synonyms, etc.
  - CAS number and other unique identifiers
  - Impurities and stabilizing additives which are themselves classified and which contribute to the classification of a substance.
- Mixture
  - The chemical identity and concentration or concentration ranges of all ingredients which are hazardous within the meaning of the GHS and are present above their cut-off levels.

## iv) Section 4. First-Aid Measures

- Description of necessary measures, subdivided according to the different routes of exposure (i.e. inhalation, skin and eye contact and ingestion).
- Most important symptoms/effects, acute and delayed. Indication of immediate medical attention and special treatment needed, if necessary.

## v) Section 5. Firefighting Measures

- Suitable (and unsuitable) extinguishing media. Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products).
- Special protective equipment and precautions for fire-fighters.

## vi) Section 6. Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures.
- Environmental precautions
- Methods and materials for containment and cleaning up.

#### vii) Section 7. Handling and Storage

- Precautions for safe handling.
- Conditions for safe storage, including any incompatibilities.

#### viii) Section 8. Exposure Controls/Personal Protection

- Control parameters (e.g. occupational exposure limit values or biological limit values).
- Appropriate engineering controls.
- Individual protection measures, such as personal protective equipment.

## ix) Section 9. Physical and Chemical Properties

- Appearance (physical state, color etc.)
- Odor
- Odor threshold
- pH
- Melting point/freezing point
- Initial boiling point and boiling range
- Flash point
- Evaporation rate
- Flammability (solid, gas)
- Upper/lower flammability or explosive limits
- Vapor pressure
- Vapor density
- Relative density
- Solubility(ies)
- Partition coefficient: n-octanol/water
- Auto-ignition temperature
- Decomposition temperature
- Viscosity

#### x) Section 10. Stability and Reactivity

- Reactivity
- Chemical stability
- Possibility of hazardous reactions
- Conditions to avoid (e.g. static discharge, shock or vibration)
- Incompatible materials
- Hazardous decomposition products

## xi) Section 11. Toxicological Information

- Concise but complete and comprehensible description of the various toxicological (health) effects and the available data used to identify those effects, including:
  - Information on the likely routes of exposure (i.e. inhalation, ingestion, skin and eye contact)
  - Symptoms related to the physical, chemical and toxicological characteristics
  - Delayed and immediate effects and also chronic effects from short and long term exposure
  - Numerical measures of toxicity (such as acute toxicity estimates)

## xii) Section 12. Ecological Information

- Eco toxicity (aquatic and terrestrial, where available)
- Persistence and degradability
- Bio accumulative potential
- Mobility in the soil
- Other adverse effects

## xiii) Section 13. Disposal Information

• Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

## xiv) Section 14. Transportation Information

- UN number
- UN proper shipping name
- Transport hazard class(es)
- Packing group, if applicable
- Environmental hazards (e.g. Marine pollutant [Yes/No])
- Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)
- Special precautions which a user needs to be aware of, or needs to comply with, in connection with the transport or conveyance within or outside their premises.

## xv) Section 15. Regulatory Information

• Safety, health and environmental regulations specific for the product in question.

## xvi) Section 16. Other Information

• Information on preparation and revision of the SDS.

Director of Environmental, Health & Safety

Date: <u>4-25-2019</u>

## IV. REVISION LOG

Revision Number	Approval Date	Description of Changes
1	04/24/2019	Formal policy created