



## SAFETY DIRECTIVE

Title: Hazard Communication Program
Issuing Department: Human Resources
Effective Date: December 20, 2023
Approved: Curry C. Hale, Human Resources Director
Type of Action: Revision

### 1.0 PURPOSE

The Town of Marana has established this Hazard Communication Program to ensure that information about the dangers of all hazardous materials utilized by the Town is available to all affected employees. Under this Program, employees will be made aware of the Occupational Safety and Health Administration (OSHA) Hazard Communications Standard (HAZCOM), the hazardous properties of materials they may be exposed to on the job, safe handling procedures, and proper measures to take to protect themselves from exposure to these materials.

This Program applies to all work operations in the Town where employees may be exposed to hazardous materials.

### 2.0 REFERENCES

2.1 GHS-Hazard Communication Standard (HCS), 29 CFR 1910.1200

2.2 Town of Marana Personnel Policies and Procedures, Chapter 7, Safety and Health

### 3.0 DEFINITIONS

3.1 Material: Any element, chemical compound or mixture of elements and/or compounds.

3.2 Combustible Liquid: Any liquid having a flashpoint at or above 100°F (37.8°C), but below 200°F (93.3°C), except any mixture having components with flashpoints of 200°F (93.3°C), or higher.

3.3 Compressed Gas: A gas, a mixture of gases, or a liquid that falls into one of the following categories:

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

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

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

- 3.4 Container: Any bag, barrel, bottle, box, can, cylinder, drum, storage tank, or the like that contains a hazardous material. For purposes of this directive, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.
- 3.5 Explosive: A material that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.
- 3.6 Exposure or Exposed: When an employee is subjected to a hazardous material in the course of employment through any route of entry (inhalation, ingestion, skin contact or absorption, etc.), and includes potential (e.g. accidental or possible) exposure.
- 3.7 Flammable: A chemical that falls into one of the following categories:
- 3.7.1 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.
  - 3.7.2 A gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of 13 percent by volume or less.
  - 3.7.3 A gas that, at ambient temperature and pressure, forms a range of flammable mixtures with air wider than 12 percent by volume, regardless of the lower limit.
  - 3.7.4 Any liquid having a flashpoint below 100°F (37.8C), except any mixture having components with flashpoints of 100°F (37.8C) or higher, the total of which make up 99 percent or more of the total volume of the mixture.
  - 3.7.5 A solid, other than a blasting agent or explosive as defined in 29 CFR 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.
- 3.8 Flashpoint: The minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite.
- 3.9 Hazard Warning: Any words, pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the hazard(s) of the chemical(s) in the container(s).
- 3.10 Hazardous Chemical: Any chemical that is a physical hazard or a health hazard.
- 3.11 Health Hazard: A chemical for which there is statistically significant evidence that acute or chronic health effects may occur in exposed employees immediate use.
- 3.12 Oxidizer: A chemical, other than a blasting agent or explosive as defined in 29 CFR 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.
- 3.13 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.

- 3.14 Pyrophoric: A chemical that will ignite spontaneously in air at a temperature of 130°F (54.4C) or below.
- 3.15 Safety Office: The Division responsible for all aspects of the Town's safety program.
- 3.16 Safety Data Sheet: Written or printed material concerning a hazardous chemical which is prepared in accordance with 29 CFR 1910.1200(g).
- 3.17 Unstable (reactive): 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.
- 3.18 Water-Reactive: A chemical that reacts with water to release a gas that is either flammable or presents a health hazard; often, when the water is heated, it goes into a gaseous state allowing oxygen to be released which can help feed a fire.

#### 4.0 POLICIES AND PROCEDURES

4.1 Written Program. The Town of Marana shall maintain this safety directive as its written Hazard Communication Program in accordance with 29 CFR 1910.1200.

4.1.1 The Safety Office shall annually review and revise this Program based on the Town's operational requirements, or as required by the OSHA Hazard Communication Standard.

4.1.2 The written Program shall:

4.1.2.1 Be available to all personnel who are affected by it.

4.1.2.2 Provide a method for proper labeling of containers, describe other needed forms of warning, and detail the use and purpose of safety data sheets.

4.1.2.3 Describe how employee information and training requirements will be met.

4.2 Training Program. The Town of Marana shall provide employees with information and training on hazardous chemicals in their work area at the time of their initial assignment, at least annually, and whenever a new chemical is introduced into their work area that could present a potential hazard.

4.2.1 All employees who work with or are potentially exposed to hazardous chemicals will receive initial training on the Hazard Communication Standard and this Program before starting work and annually thereafter. Training shall include but not be limited to:

4.2.1.1 An overview of the OSHA Hazard Communication Standard

4.2.1.2 How to read labels and Safety data sheets to obtain hazard information

4.2.1.3 The employer's responsibility to the employee

4.2.2 The department will orient the new employee to the following:

4.2.2.1 The hazardous chemicals present at his/her work area.







4.2.2.2 The locations of the physical and digital safety data sheet binders.

4.2.2.3 How to reduce or prevent exposure to hazardous chemicals through use of control procedures, work practices and personal protective equipment.

4.2.2.4 Procedures to follow if employees are overexposed to hazardous chemicals.

- 4.2.3 Prior to introducing a new material hazard into any work area, each employee in that work area will be given the opportunity to review information outlined on the safety data sheet associated with that material. The employee may request additional training to be accomplished via classroom instruction, interactive computer programs, audiovisuals, safety training videos, or other effective methods.
- 4.2.4 Employees transferred to another Town department either temporarily or permanently will be briefed on the duty-specific hazards by their immediate supervisor before they begin any duties within the department.
- 4.2.5 Initial and annual training records shall be filed digitally through the training portal. Departmental orientation records shall be kept by the department.
- 4.3 Container Labeling. All containers that contain materials covered under this program shall be properly labeled. The Safety Office will review the Town's labeling procedures on an annual basis
- 4.3.1 All containers received for use shall be clearly labeled as to the contents, shall note the appropriate hazard warning, and shall list the manufacturer's name and address.
- 4.3.2 All secondary containers shall be labeled with the most current label available by the manufacturer. Labels can be produced from the Towns safety data sheet digital inventory.
- 4.3.3 Unlabeled containers containing hazardous materials may only be utilized if the container is portable and in the control of a specific person for their immediate and complete use.
- 4.3.4 The Hazard Communication Standard does not require labeling of the following chemicals:
- 4.3.4.1 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.
- 4.3.4.2 Any food, food additive, color additive, drug, cosmetic, or medical or veterinary device.
- 4.3.4.3 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.
- 4.3.4.4 Labeling of containers of chemicals and hazardous materials being shipped off site designated as hazardous waste. Where these materials are classified as hazardous waste, they fall under 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.*), and the provisions of 40 CFR, and as such will be subject to regulations issued under that Act by the Environmental Protection Agency.
- 4.4 Safety data sheets. The Town shall establish and maintain a digital and physical safety data sheets program in compliance with the OSHA Hazard Communication Standard. The Town shall ensure that procedures are developed to obtain the necessary Safety data sheets, to review incoming safety data sheets for new or significant health and safety information, and to communicate any new information to affected employees.

- 4.4.1 Physical copies of safety data sheets for all hazardous chemicals to which employees are exposed or are potentially exposed will be kept in the locations where the chemicals are stored and or used.
- 4.4.2 Digital copies of all Safety data sheets and their respective locations will be available to all employees through the Town safety data sheet online vendor.
- 4.4.3 Physical and digital copies of safety data sheets will be readily available to all affected employees during each work shift. If a safety data sheet is not available, the employee should contact their Supervisor or the Safety Office.
- 4.4.4 When revised safety data sheets are received, the following procedures will be followed to replace old safety data sheets:
  - 4.4.4.1 The Safety Office shall email designated department employees advising them of the new, revised safety data sheets within five work days of receipt of the revised safety data sheets.
  - 4.4.4.2 The department designee will be responsible for adding the new or revised safety data sheets to their physical binder.
  - 4.4.4.3 The department will be responsible for archiving any prior version of the safety data sheet(s).
- 4.4.5 If a safety data sheet is not received at the time of an initial shipment of a chemical, the employee receiving the chemical shall call the vendor and request the safety data sheet. The employee shall make the call within one day of receipt of the material.
- 4.4.6 The affected department must notify the Safety Office of any new safety data sheets added to their inventory.
- 4.4.7 The Safety Office will work with the department to update the Town's digital inventory with the new safety data sheets.
- 4.5 Hazard Identification: Section 2 of the safety data sheet and the material container label, contain Hazard Identification information that shall be conveyed to the employee prior to chemical use. Hazard Identification comes in the form of:
  - 4.5.1 Pictograms (see figures below)
  - 4.5.2 Hazard Statements
  - 4.5.3 Precautionary Statements

Description	Pictogram	Hazard class and hazard category:
<b>Exploding Bomb</b>		Unstable explosives Explosives of Divisions 1.1, 1.2, 1.3, 1.4 Self-reactive substances and mixtures, Types A, B Organic peroxides, Types A, B
<b>Flame</b>		Flammable gases, category 1 Flammable aerosols, categories 1,2 Flammable liquids, categories 1,2,3 Flammable solids, categories 1,2 Self-reactive substances and mixtures, Types B,C,D,E,F Pyrophoric liquids, category 1 Pyrophoric solids, category 1 Self-heating substances and mixtures, categories 1,2 Substances and mixtures, which in contact with water, emit flammable gases, categories 1,2,3 Organic peroxides, Types B,C,D,E,F
<b>Flame Over Circle</b>		Oxidizing gases, category 1 Oxidizing liquids, categories 1,2,3
<b>Gas Cylinder</b>		Gases under pressure: - Compressed gases - Liquefied gases - Refrigerated liquefied gases - Dissolved gases
<b>Corrosion</b>		Corrosive to metals, category 1 Skin corrosion, categories 1A, 1B, 1C Serious eye damage, category 1
<b>Skull and Crossbones</b>		Acute toxicity (oral, dermal, inhalation), categories 1, 2, 3

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**Exclamation Mark**



Acute toxicity (oral, dermal, inhalation), category 4  
Skin irritation, category 2  
Eye irritation, category 2  
Skin sensitization, category 1  
Specific Target Organ Toxicity – Single exposure, category 3

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**Health Hazard**



Respiratory sensitization, category 1  
Germ cell mutagenicity, categories 1A,1B,2  
Carcinogenicity, categories 1A,1B,2  
Reproductive toxicity, categories 1A,1B,2  
Specific Target Organ Toxicity – Single exposure, categories 1,2  
Specific Target Organ Toxicity – Repeated exposure, categories 1,2  
Aspiration Hazard, category 1

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**Environment**



Hazardous to the aquatic environment  
Acute hazard, category 1  
Chronic hazard, categories 1,2

4.6 Materials Inventory A list of all known hazardous materials used by Town employees is located in the Towns digital inventory. This inventory is updated regularly and is maintained by the Towns contracted vendor and the Safety Office. The inventory links directly to the individual safety data sheets and is available to all Town employees.

4.6.1 When new chemicals are received, the inventory shall be updated within 30 days by the Safety Office. To ensure any new chemical is added in a timely manner, the following procedures shall be followed:

4.6.1.1 The supervisor shall report the receipt of the new chemical to the Safety Office

4.6.1.2 The Materials Inventory will be updated and maintained by the Safety Office

4.7 Program Availability. A copy of this Hazard Communication Program will be made accessible to all employees via the Town's intranet.

**5.0 RESPONSIBILITIES**

5.1 The Safety Office is responsible for facilitating development, review, and revision of this Hazard Communication Program.

5.2 Department Heads, managers and supervisors are responsible for ensuring that the requirements of this Program are fully implemented in their work areas.

5.3 Employees are responsible for attending all mandatory training classes, and understanding the policies and procedures outlined in this Program, as well as all Town health and safety procedures.

## 6.0 ATTACHMENTS

6.1 Attachment A. Hazard Information / Chemical Shipping Label and Interpretation

6.2 Attachment B. OSHA Quick Card: Hazard Communication Safety data sheets



# Attachment A

## HAZARD INFORMATION / CHEMICAL SHIPPING LABEL AND INTERPRETATION

<b>Benzene</b>		Weight	20Kg
		CAS No. 71-43-2	UN No. 1114
<b>Hazard</b>			
			
Flammable	Caution	Health Hazard	
<b>Hazardous Information</b> Liquid or vapor that is extremely flammable Fatal if swallowed <b>Skin Irritation</b> Serious eye irritation Threat of genetic diseases Threat of carcinogenesis May damage fertility or unborn child Organ (lung) failure Threat of drowsiness and dizziness May cause irritation to respiratory Organ failure (central nerve, haemopoietic system, immune system) if long term or repeatedly exposed to air.			
<b>Precautionary Statement</b> Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from ignition sources such as heat/sparks/open flame – No smoking Ground/bond the container and receiving equipment, if electrostatically sensitive material is for reloading. Use explosion-proof electrical/ventilating/lighting/...equipment. Take precautionary measures against static discharge. Use tools that do not cause fire. Wear protective gloves and eye/face protection. Use personal protective equipment as required. Do not breathe mist/vapor/spray. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. If swallowed: Rinse mouth. Do not induce vomiting. If on skin (hair): Take off/remove immediately all contaminated clothing. Wash the skin with water/shower. If on skin: Wash with plenty of soap and water. Take off/remove immediately all contaminated clothing. Take off contaminated clothing and wash before re-use. If inhaled: Remove to fresh air and keep at rest in a position comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Seal container tightly and store it. Store container in cool/well-ventilated places. Store locked up. Dispose of contents/container to... (in accordance with local/regional/national/international regulation).			
No fire Hazard Category - 4 Ignition liquid First petroleum Water non-soluble liquid Danger rating II			
<b>For enquiries, please contact SATO ASIA PACIFIC PTE LTD</b> Rina Phua (HP:9850 0730) or Eugene Poh (HP: 9684 8048) 438A Alexandra Road #05-01/04, Alexandra Technopark, Singapore 119967 Tel: (65) 6271 5300 Fax: (65) 6273 6011 www.satoworldwide.com			

1. Name of Chemical

2. Barcode

3. Precautionary Statement

4. Pictogram

5. Hazard Information

6. Note of caution

7. Manufacturer or Provider of Chemical company

## Attachment B



### Hazard Communication Safety data sheets

The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets (formerly known as Material Safety Data Sheets or MSafety data sheets) to communicate the hazards of hazardous chemical products. As of June 1, 2015, the HCS will require new Safety Data Sheets to be in a uniform format, and include the section numbers, the headings, and associated information under the headings below:

**Section 1, Identification** includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

**Section 2, Hazard(s) identification** includes all hazards regarding the chemical; required label elements.

**Section 3, Composition/information on ingredients** includes information on chemical ingredients; trade secret claims.

**Section 4, First-aid measures** includes important symptoms/ effects, acute, delayed; required treatment.

**Section 5, Fire-fighting measures** lists suitable extinguishing techniques, equipment; chemical hazards from fire.

**Section 6, Accidental release measures** lists emergency procedures; protective equipment; proper methods of containment and cleanup.

**Section 7, Handling and storage** list precautions for safe handling and storage, including incompatibilities.

**Section 8, Exposure controls/personal protection** lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).

**Section 9, Physical and chemical properties** lists the chemical's characteristics.

**Section 10, Stability and reactivity** list chemical stability and possibility of hazardous reactions.

**Section 11, Toxicological information** includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

**Section 12, Ecological information\***

**Section 13, Disposal considerations\***

**Section 14, Transport information\***

**Section 15, Regulatory information\***

**Section 16, Other information,** includes the date of preparation or last revision.

**REVISION HISTORY**

<b><i>REV</i></b>	<b><i>DESCRIPTION OF CHANGE</i></b>	<b><i>DATE</i></b>
<b>OR</b>	Original Release	12/17/2013
<b>REV</b>	Updated by Safety Office to include Pictograms, included attachments, Master Chemical Inventory and annual review	09/01/2014
<b>REV</b>	Updated by Safety Office to reflect current standards and resources.	12/20/2023

**Caution:** A copy of this Administrative Directive is an uncontrolled document. It is your responsibility to ensure you are using the current version. The electronic version is the only acceptable and controlled Administrative Directive.