HAZARD COMMUNICATIONS

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- The Michigan Occupational Safety and Health Administration strives to work collaboratively with employers and employees to better prevent workplace injuries, illnesses, and fatalities.

- Under the agreement that allows Michigan to operate a state plan, the MIOSHA standards must be at least as effective as the federal OSHA regulations.

GENERAL INDUSTRY SAFETY STANDARD PART 92. HAZARD COMMUNICATION

Training Objectives:

- Why this standard took effect
- Discussion of The Right-to-Know Law
- GHS - Workplace Specifics
- Review of Label Requirements / SDS
- Question & Answer

GENERAL INDUSTRY SAFETY STANDARD PART 92. HAZARD COMMUNICATION

- Under the standard,
  - Employers must identify and evaluate chemical hazards in the workplace
  - Provide a Written Hazard Communications Plan: Communicate information concerning those hazards to employees.
  - Make sure that employees receive HC information by implementing a comprehensive hazard communication program.
    - Container Labeling
    - Safety Data Sheets (SDSs)
    - Employee Training – Hazards & Protective Measures

Globally Harmonized System GHS

- HC Standard Revised 2012:
  - create and enhance a globally harmonized system for the classification and labeling of chemicals that can be used by importers, distributers and manufacturers worldwide.
  - Providing a common and coherent approach to classifying chemicals.
- Benefits:
  - Reduce confusion and increase understanding of the hazards.
  - Facilitate training
  - Help address literacy problems particularly due to use of pictograms

Product Label

There are several new label elements:

- Symbols called "Pictograms"
- Signal Words
- Hazard Statements
- Precautionary Statements
- Product Identification
- Supplier/Manufacturer Identification

SAMPLE LABEL

PRODUCT IDENTIFIER

CODE _____
Product Name _____

SUPPLIER IDENTIFICATION

Company Name_____
Street Address _____
City _____ State _____
Postal Code _____ Country _____
Emergency Phone Number _____

PRECAUTIONARY STATEMENTS

Keep container tightly closed. Store in cool, well ventilated place that is locked.
Keep away from heat/sparks/open flame. No smoking.
Only use non-sparking tools.
Use explosion-proof electrical equipment.
Take precautionary measure against static discharge.
Ground and bond container and receiving equipment.
Do not breathe vapors.
Wear Protective gloves.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Dispoae of in accordance with local, regional, national, international regulations as specified.

In Case of Fire: use dry chemical (BC) or Carbon dioxide (CO_2) fire extinguisher to extinguish.

First Aid
If exposed call Poison Center.
If on skin (on hair): Take off immediately any contaminated clothing. Rinse skin with water.

HAZARD PICTOGRAMS

SIGNAL WORD

Danger

HAZARD STATEMENT

Highly flammable liquid and vapor.
May cause liver and kidney damage.

SUPPLEMENTAL INFORMATION

Directions for use
_____
_____
_____

Fill weight: _____ Lot Number _____
Gross weight: _____ Fill Date: _____
Expiration Date: _____

www.osha.gov/Publications/HazComm_QuickCard_Labels.html

Labels

Effective June 1, 2015 all shipping labels will be required to have all GHS label elements

Shipping Container Label
(55 gallon/200 liter drum)

PRODUCT IDENTIFIER

CODE _____
Product Name _____

SUPPLIER IDENTIFICATION

Company Name_____
Street Address _____
City _____ State _____
Postal Code _____ Country _____
Emergency Phone Number _____

PRECAUTIONARY STATEMENTS

Keep container tightly closed. Store in cool, well ventilated place that is locked.
Keep away from heat/sparks/open flame. No smoking.
Only use non-sparking tools.
Use explosion-proof electrical equipment.
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SIGNAL WORD
Danger

HAZARD STATEMENT

Highly flammable liquid and vapor.

SUPPLEMENTAL INFORMATION

Directions for use
_____
_____
_____

Fill weight: _____ Lot Number _____
Gross weight: _____ Fill Date: _____
Expiration Date: _____

Pictograms within DOT label

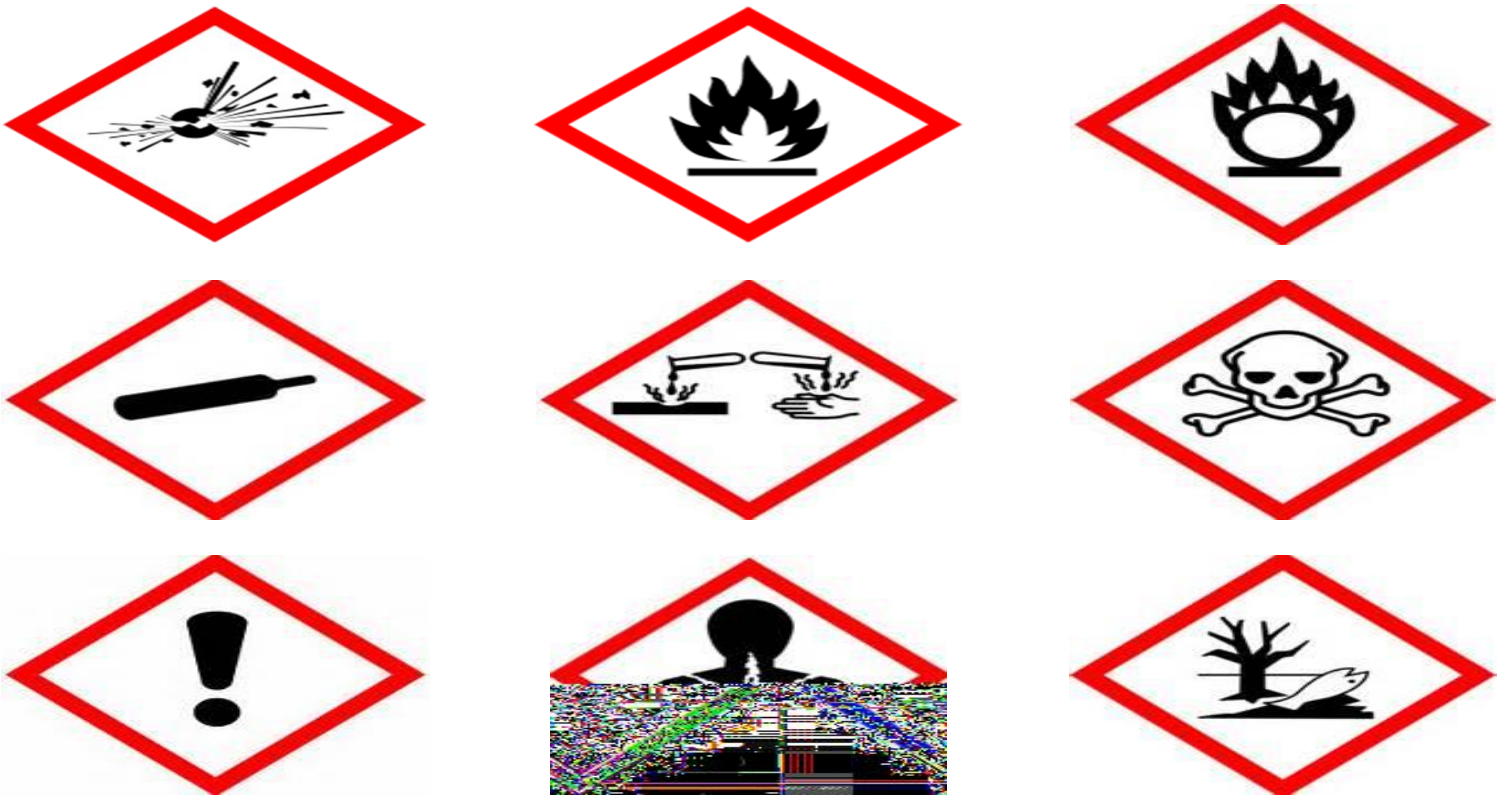
DOT Shipping

Flammable liquids, toxic, n.o.s. (contains XYZ)
UN 1992

Hazardous Chemical Pictograms

There are 9 pictograms. Only 8 are regulated by MIOSHA

- Health Hazards
- Physical Hazards
- Environmental Hazards (Regulated by DEQ)



- Explosives
- Self-Reactives
- Organic Peroxides

- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

- Oxidizer

- Gas (Under Pressure)

* Skin Corrosion/Burns
* Eye Damage
* Corrosive to Metals

– Acute Toxicity (Fatal or Toxic)

* Irritant (Skin and Eye)
* Skin Sensitizer
* Acute Toxicity (Harmful)
* Narcotic Effects
* Respiratory Tract Irritant

* Carcinogen
* Mutagenicity
* Reproductive Toxicity
* Target Organ Toxicity
* Aspiration Toxicity

- Environmental (Non-Mandatory)

Labels: Signal Word

These are words used to indicate the severity of the hazard and alert employees to the potential hazard.

Only 2 signal words will appear:

- **"DANGER"** (more severe hazard)
- **"WARNING"** (less severe hazard)

Not all labels will have a signal word. Some chemicals are not hazardous enough to require that a signal word appear on the label.

Labels: Hazard Statement

There are specific hazard statements that must appear on the label based on the chemical hazard classification.

Examples:

- Flammable liquid and vapor
- Causes skin irritation
- May cause cancer

Labels and other forms of warning – Precautionary Statements

- Recommended measures related to:
  - Prevention
  - Response
  - Storage
  - Disposal

- Examples:
  - Wear respiratory protection
  - Wash with soap and water
  - Store in a well ventilated place

- Not a mandate for employers/employees to follow.

Label: Identification

- Product identification (i.e. name of product)
- Supplier identification:
  - Address
  - Telephone number

Label: Other information

Other information that may be included on the label:

- Physical state
- Color
- Hazards not otherwise classified
- Route of exposure
- Storage and disposal
- Hazard prevention and emergency response instructions

Labels: Secondary or Portable Containers

If a hazardous chemical is transferred to a portable/secondary container for use or storage, it must be either:

- provided with a label containing the GHS label elements; **or**
- an equally effective alternative means of informing the workers may be used

Labels: Secondary or Portable Containers

- Must be consistent with the revised Haz Com standard
- No conflicting hazard warnings or pictograms.
- May use written materials (e.g., signs, placards, etc.) in lieu of affixing labels to individual stationary process containers.
- Employer can use GHS compliant labels (same as shipping).

Secondary Labels! Why?

A 7-year-old Colorado boy was served a vanilla milkshake tainted with chemical cleaner after an employee mistakenly filled a cleaning bottle with syrup. … the mistake occurred when one employee left a container with chemical cleaner in the sink and then another employee later filled that container with vanilla syrup, thinking the container was clean.

A Utah woman was hospitalized after drinking tea tainted with at a barbecue restaurant. … an employee mistook degreaser – made up of sodium hydroxide, or lye – for sugar, mixing it into the tea and causing extreme burns to the woman's throat and mouth, authorities say

Parents of a middle school students received a letter last Wednesday detailing a cafeteria mix up involving glass cleaner … three pans full of marinara sauce had been "inadvertently prepped with a glass cleaner instead of a non-stick cooking spray."

A total of 28 children and two adults were hospitalized after drinking a mixture of water and bleach at a day care in New Jersey … Firefighters said a substitute teacher at the day care center was preparing water cups for the children when she accidently poured from a bottle containing the mixture.

Two toddlers had to be treated in hospital after being mistakenly served industrial cleaning fluid instead of water at a restaurant… The child's cup had been accidentally filled with a chemical used to clean pipes, which had been left in an unmarked jug and was picked up by the waiting staff.

Safety Data Sheets:
Your Rights:

- Required from the manufacturer or distributor of any hazardous material.
- Contains sections of information about the hazardous material.
- Your employer must have an MSDS for every hazardous substance you use as part of your job.
- These MSDS's must be available to you the entire time you are in the workplace.

Safety Data Sheets (SDSs)

New 16-section standardized SDS format required (ANSI Z400.1)

Section 1 – Identification

Section 2 – Hazard(s) identification

Section 3 – Composition / Information on Ingredients

Section 4 – First-aid Measures

Section 5 – Fire-fighting Measures

Section 6 – Accidental Release Measures

Section 7 – Handling and Storage

Section 8 – Exposure Controls / Personal Protection

Section 9 – Physical and Chemical Properties

Section 10 – Stability and Reactivity

Section 11 – Toxicological Information

Section 12 – Ecological Information*

Section 13 – Disposal Consideration*

Section 14 – Transport Information*

Section 15 – Regulatory Information*

Section 16 – Other information including date of preparation of last revision

*Sections outside of MIOSHA jurisdiction but inclusion of these sections is necessary for a GHS compliant SDS

Safety Data Sheets (continued)

Section 1 – Identification:

Identifies the chemical on the SDS as well as the recommended uses. It also provides the essential contact information of the supplier.

Section 2 - Hazards Identification:

- Hazards of the chemical presented on the SDS
- Appropriate warning information associated with those hazards.

Safety Data Sheets (continued)

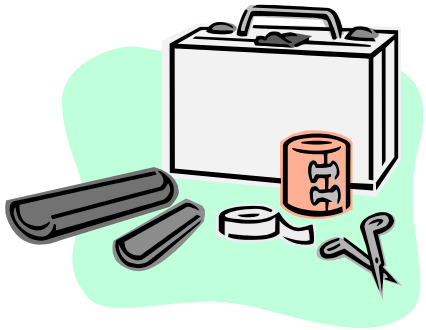
Section 3 – Composition / Ingredients:

Identifies the ingredient(s) contained in the product indicated on the SDS, including:

•impurities and stabilizing additives.

•information on substances, mixtures, and all chemicals where a trade secret is claimed.

Section 4 - First-Aid Measures:



Describes the initial care that should be given by untrained responders to an individual who has been exposed to the chemical.

Safety Data Sheets (continued)

Section 5 – Fire-Fighting Measures:

Provides recommendations for fighting a fire caused by the chemical.

Section 6 - Accidental Release Measures:

Provides recommendations:

- Appropriate response to spills, leaks, or releases, (e.g. containment and cleanup practices)
- Response for large vs. small spills, if different.

Safety Data Sheets (continued)

Section 7 – Handling and Storage:

Provides guidance on the safe handling practices and conditions for safe storage of chemicals.

Section 8 – Exposure Controls / Personal Protection:

Indicates the exposure limits, engineering controls, and personal protective measures that can be used to minimize worker exposure.

Safety Data Sheets (continued)

Section 9 – Physical and Chemical Properties:

Identifies physical and chemical properties associated with the substance or mixture.

Section 10 – Stability and Reactivity

Describes the reactivity hazards of the chemical and the chemical stability information. Includes: reactivity, chemical stability,

and other.

Safety Data Sheets (continued)

Section 11 - Toxicological Information:

Identifies toxicological and health effects information or indicates is data unavailable.

Section 12 – Ecological Information*

Section 13 – Disposal Consideration*

Section 14 – Transport Information*

Section 15 – Regulatory Information*

*Sections are outside of MIOSHA jurisdiction but must be included for a GHS compliant SDS.

Safety Data Sheets (continued)

Section 16 – Other Information

Indicates when the SDS was prepared or when the last known revision was made.

The SDS may also state where the changes have been made to the previous version.

Revised Posters – MSDS to SDS Act 154

This Workplace Covered by the Michigan Right To Know Law

Employers must make available for employees in a readily accessible manner, Safety Data Sheets (SDS)* for those hazardous chemicals in their workplace.

Employees cannot be discharged or discriminated against for exercising their rights including the request for information on hazardous chemicals.

Employees must be notified and given direction (by employer posting) for locating Safety Data Sheets and the receipt of new or revised SDS(s).

* When the employer has not provided a SDS, employees may request assistance in obtaining SDS from the:

Michigan Department of Licensing and Regulatory Affairs
Michigan Occupational Safety & Health Administration
General Industry Safety & Health Division
(517) 322-1831
Construction Safety & Health Division
(517) 322-1856
www.michigan.gov/miosha
MIOSHA/CET #2105 (Rev. 10/12)

MIOSHA
Michigan Occupational Safety and Health Administration

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SDS(s) For This Workplace Are Located At

Location(s)

Location(s)

Person(s) responsible for SDS(s)

Phone

As Required by the Michigan Right To Know Law

TO BE POSTED THROUGHOUT THE WORKPLACE NEXT TO SDS LOCATION POSTERS

New or Revised SDS

New or Revised Title	Receipt Date	Posting Date	Location of New or Revised SDS

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Michigan Department of Licensing and Regulatory Affairs
Michinga Occupational Safety & Health Administration
Consultation, Education & Training Division
(517) 322-1809

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Michigan Occupational Safety and Health Administration

For further information, visit our website at:
www.michigan.gov/miosha

Hazard Communication Training

Employers must provide employees with the details of the **facility specific** hazard communication program:

- Location and availability of written program and SDSs
- Specific information related to chemicals in the facility and procedures to follow to protect employees from the chemical hazard

Employers,

- Maintain and review Written Haz Com program
- Maintain a secondary container labeling system
- Methods used to detect the presence or release of hazardous chemicals (sensor alarms, odors, visual other monitoring devices)

THANK YOU

Questions

Or

Comments?

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You can also visit the MIOSHA website at

www.michigan.gov/mioshapublications

where additional information may be available;
or contact the

Consultation, Education & Training Division at
(517) 322-1809