



# IS YOUR HAZARDOUS COMMUNICATION PROGRAM READY FOR INSPECTION

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RISK MANAGER

## COURSE OUTLINE

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- Introduction to the Texas Hazard Communication Act
- Hazardous Chemicals
- Routes of Entry
- GHS Labels & Pictograms
- Safety Data Sheets (SDS)
- Controlling Chemical Hazards/Personal Protective Equipment
- Alternative Labeling Systems

## COURSE OBJECTIVES

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In compliance with HSC 502.009 and 25 TAC 295.7, at the end of the course:

- Understand the Texas Hazard Communication Act and employee rights/responsibilities
- Identify information found on a Safety Data Sheet and Chemical Label
- Understand potential physical and health effects associated with hazardous chemicals
- Understand alternate labeling and warning systems
- Review basic personal protective equipment requirements

## THIS COURSE WILL NOT...

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- Provide safety instruction on handling, cleanup, and disposal procedures
- Instruct you on proper use of personal protective equipment
- Review specific first aid treatment for exposure

The topics above should be reviewed individually, or as a group, with your supervisor or manager

## TEXAS HAZARD COMMUNICATION ACT

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- The Texas Health and Safety Code, Title 6. Chapter 502 Hazard Communication Act requires the State of Texas and its Political Subdivisions to provide their employees with information regarding hazardous chemicals to which employees may be exposed to in their workplace. Also give you the right to:
  - Access to copies of Safety Data Sheets (SDS)
  - Information on their chemical exposures
  - Receive training on chemical hazards
  - Receive appropriate protective equipment





## TEXAS TOP VIOLATIONS

Violation	Count
HSC 502.009(g) Failure to maintain training session records for the past five years	23
§295.6(c) Failure to properly label container hazardous chemical containers	21
§295.4(a) Failure to maintain a workplace chemical list	20
§295.5(a) Failure to maintain a complete file of safety data sheets	20
§295.7(a) Failure to develop a written hazard communication program	16
§295.7(d) Failure to provide employee training program	14
§295.12(c) Failure to post a current version of the “notice to employees” at all location	6
§295.12(g) Failure to provide appropriate personal protective equipment (PPE)	1

# LEARN, LIVE AND FOLLOW



Figure 4

# WRITTEN PROGRAM

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- §295.7. – WRITTEN HAZARD COMMUNICATION PROGRAM AND EMPLOYEE EDUCATION AND TRAINING PROGRAM
  - Workplace Chemical List
  - Safety Data Sheet
  - Employee Education & Training Program
  - Labels
  - Training



# EMPLOYEE RIGHTS & RESPONSIBILITIES

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Employees have the right to:

- Access copies of Safety Data Sheets.
- Information on their chemical exposures.
- Receive training on chemical hazards.
- Receive appropriate personal protective equipment PPE.
- File complaints, assist inspectors, or testify against their employers.



# EMPLOYEE RIGHTS

[Hazard Communication  
Worker Right-to-Know  
Program | Texas DSHS](#)

[Link to mandatory poster](#)

## NOTICE TO EMPLOYEES

The Texas Hazard Communication Act, codified as Chapter 502 of the Texas Health and Safety Code, requires public employers to provide employees with specific information on the hazards of chemicals to which employees may be exposed in the workplace. As required by law, your employer must provide you with certain information and training. A brief summary of the law follows.

<p><b>HAZARDOUS CHEMICALS</b></p> <p>Hazardous chemicals are any products or materials that present any physical or health hazards when used, unless they are exempted under the law. Some examples of more commonly used hazardous chemicals are fuels, cleaning products, solvents, many types of oils, compressed gases, many types of paints, pesticides, herbicides, refrigerants, laboratory chemicals, cement, welding rods, etc.</p> <p><b>WORKPLACE CHEMICAL LIST</b></p> <p>Employers must develop a list of hazardous chemicals used or stored in the workplace in excess of 55 gallons or 500 pounds. This list shall be updated by the employer as necessary, but at least annually, and be made readily available for employees and their representatives on request.</p> <p><b>EMPLOYEE EDUCATION PROGRAM</b></p> <p>Employers shall provide training to newly assigned employees before the employees work in a work area containing a hazardous chemical. Covered employees shall receive training from the employer on the hazards of the chemicals and on the measures they can take to protect themselves from those hazards. This training shall be repeated as needed, but at least whenever new hazards are introduced into the workplace or new information is received on the chemicals which are already present.</p>	<p><b>SAFETY DATA SHEETS</b></p> <p>Employees who may be exposed to hazardous chemicals shall be informed of the exposure by the employer and shall have ready access to the most current Safety Data Sheets (SDSs) or Material Safety Data Sheets (MSDSs) if an SDS is not available yet, which detail physical and health hazards and other pertinent information on those chemicals.</p> <p><b>LABELS</b></p> <p>Employees shall not be required to work with hazardous chemicals from unlabeled containers except portable containers for immediate use, the contents of which are known to the user.</p> <p><b>EMPLOYEE RIGHTS</b></p> <p>Employees have rights to:</p> <ul style="list-style-type: none"><li>• access copies of SDSs (or an MSDS if an SDS is not available yet)</li><li>• information on their chemical exposures</li><li>• receive training on chemical hazards</li><li>• receive appropriate protective equipment</li><li>• file complaints, assist inspectors, or testify against their employer</li></ul> <p>Employees may not be discharged or discriminated against in any manner for the exercise of any rights provided by this Act. A waiver of employee rights is void; an employer's request for such a waiver is a violation of the Act. Employees may file complaints with the Texas Department of State Health Services at the telephone numbers provided below.</p>
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**EMPLOYERS MAY BE SUBJECT TO ADMINISTRATIVE PENALTIES AND CIVIL OR CRIMINAL FINES RANGING FROM \$50 TO \$100,000 FOR EACH VIOLATION OF THIS ACT**

<p>Further information may be obtained from:</p> <p>Texas Department of State Health Services Consumer Protection Division Policy, Standards, &amp; Quality Assurance Section Environmental Hazards Unit PO Box 149347, MC 1987 Austin, TX 78714-9347</p>	<p>(512) 834-6787 (800) 293-0753 (toll-free) Fax: (512) 834-6726 E-mail: <a href="mailto:TXHazComHelp@dshs.texas.gov">TXHazComHelp@dshs.texas.gov</a> Website: <a href="http://www.dshs.texas.gov/hazcom">www.dshs.texas.gov/hazcom</a></p>
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**TEXAS**  
Health and Human  
Services

Texas Department of State  
Health Services

Worker Right-To-Know Program  
Publication # 23-14173  
Revised 05/2018

## EMPLOYER RESPONSIBILITIES

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- Make sure your written plan is reviewed annually, up to date and signed.
- Maintain an up-to-date chemical inventory list.
- Remove SDS sheets for chemicals that are no longer being used, but you must keep them for 20 years after the removal.
- Provide training on your program within 30 days of hiring and before allowing any employee to work with chemicals.
- Provide training anytime a new chemical is introduced into the workplace.
- Provide appropriate PPE and review PPE annually.

## WORKPLACE CHEMICAL LIST/INVENTORY

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- Public employers to compile and maintain a workplace chemical list (WCL) of each hazardous chemical normally present in the workplace in excess of **55 gallons** or **500 pounds (Aggregate)**.
- The WCL may be prepared for the workplace as a whole or for each work area within a specified workplace.

# PREPARING THE WORKPLACE CHEMICAL LIST

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- Preparing the Workplace Chemical List: The WCL should include the following information for each hazardous chemical listed and for each workplace or work area for which it is prepared:
  - The identity of the hazardous chemical as it appears on the Safety Data Sheet (SDS) and container label.
  - The work area(s) in which the chemical is normally present.
  - The name and signature of the person who prepared the WCL.
  - The date on which the WCL was prepared. **(UPDATE YEARLY)**



# PERSONAL PROTECTIVE EQUIPMENT

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- THCA defines appropriate PPE to be equipment that is provided to an employee by employer and affords an adequate level of protection from chemicals to which the employee may be exposed.
- Ex. Gloves, safety/splash proof goggles, respirators, etc.
- If you find, see or come across a piece of PPE that you believe may be better than currently .being used, then please provide to your supervisor.



# HAZARDOUS CHEMICALS

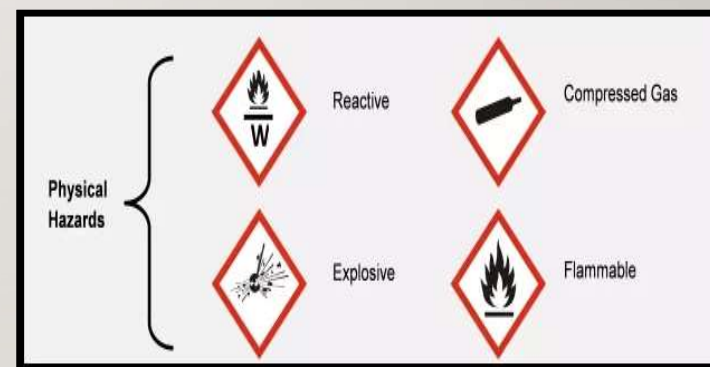
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- A hazardous chemical is defined by the THCA as any element, compound, or mixture of elements or compounds that is a health hazard, or a physical hazard as defined by the federal Occupational Safety and Health Administration (OSHA) Hazard Communication Standard.



## PHYSICAL HAZARDS

- A chemical is a physical hazard if it:
- Is likely to burn or support fire;
- May explode or release high pressures that can inflict bodily injury; or
- Can spontaneously react on it own, or when exposed to water.



# HEALTH HAZARDS

- The term “health hazard” includes chemicals and agents which damage the lungs, skin, eyes, or mucous membranes. A health hazard means a chemical that has been shown to cause **acute** or **chronic** health effects in exposed employees.



## ARE THERE EXEMPTIONS FROM THE THCA?

1. Hazardous waste regulated by the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. Section 6901 et seq.), when subject to regulations issued under that Act by the Environmental Protection Agency;
2. Tobacco or tobacco products;
3. Wood or wood products;
4. Articles, which are defined as a manufactured item that is formed to a specific shape or design during manufacture; that has end use functions dependent in whole or in part on its shape or design during end use; and that does not release, or otherwise result in exposure to, a hazardous chemical under normal conditions of use;
5. Food, drugs, or cosmetics intended for personal consumption by an employee while in the workplace;
6. **Consumer products or hazardous substances when used in the workplace in the same manner as normal consumer use and if the use results in a duration and frequency of exposure that is not greater than exposures experienced by consumers;**
7. Drugs

# HAZARDOUS CHEMICAL FORMS

## Solids



Usually found as a dust or powder but also can be in bulk form. Fine Dusts and powders can be dispersed easily into the air and can cause both physical and health hazards.

## Liquids



Liquids, including vapors and mists, are extremely common and include fuels, solvents, cleaning supplies, and a large number of other chemicals. Liquids can also cause a wide range of both physical and health hazards.

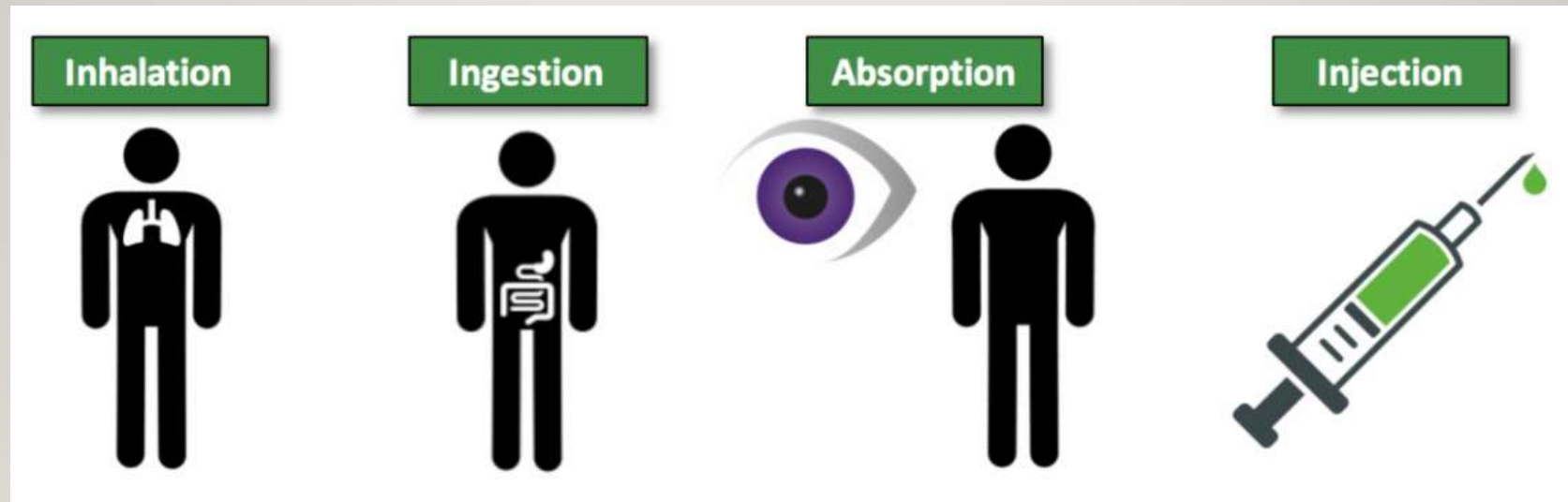
## Gases



Usually found in cylinders but can also be present in aerosol cans or as emissions from a particular process. Gases can pose health hazards, while physical hazards are especially prevalent when confined.



# ROUTES OF ENTRY






## GHS LABELS & PICTOGRAMS

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- Purpose of container labeling is to provide an **immediate warning** to employees of the hazards they may be exposed to; and through the chemical name, labels provide a link to more detailed information.
- Chemical labels must be legible and include: **product identifier, signal word, hazard statement(s), pictograms, precautionary statement(s)**, and the **name; address and telephone** of the chemical manufacturer or responsible party.

# LABEL ESSENTIALS

**SAMPLE LABEL**

<p>CODE _____ } <b>Product Identifier</b>                  Product Name _____ }</p> <p>Company Name _____ } <b>Supplier Identification</b>                  Street Address _____ }                  City _____ State _____ }                  Postal Code _____ Country _____ }                  Emergency Phone Number _____ }</p>	<p><b>Hazard Pictograms</b></p>  <p><b>Signal Word</b>  <b>Danger</b></p>	<p><b>Hazard Statements</b></p> <p>Highly flammable liquid and vapor.                  May cause liver and kidney damage. }</p>
<p><b>Precautionary Statements</b></p> <p>Keep container tightly closed. Store in a 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 measures 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.                  Dispose of in accordance with local, regional, national, international regulations as specified.</p> <p><b>In Case of Fire:</b> use dry chemical (BC) or Carbon Dioxide (CO<sub>2</sub>) fire extinguisher to extinguish.</p> <p><b>First Aid</b>                  If exposed call Poison Center.                  If on skin (or hair): Take off immediately any contaminated clothing. Rinse skin with water.</p>	<p><b>Supplemental Information</b></p> <p><b>Directions for Use</b></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Fill weight: _____ Lot Number: _____                  Gross weight: _____ Fill Date: _____                  Expiration Date: _____</p>	

## TYPES OF CONTAINERS

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- **Primary** are the containers in which the hazardous chemical was received from the manufacturer or distributor.
- **Secondary** is one to which the hazardous chemical is transferred after receipt from the supplier. Secondary containers must be labeled with at least the identity appearing on the SDS and the appropriate hazard warnings.
- **Portable** intended for the immediate use of the employee who performs the transfer do not require labels.

# CONTAINER EXAMPLES

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Primary Container



Secondary Containers



Portable Container

Forget this option even exists. You will never consistently follow the rules.





# GHS LABELS & PICTOGRAMS

- The pictograms alert users of the chemical hazards to which they may be exposed.
- Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s).
- The pictogram on the label is determined by the chemical hazard classification.



# HEALTH HAZARDS

- Carcinogen—may cause cancer
- Respiratory sensitizer—may cause respiratory irritation
- Reproductive toxicity—may damage fertility or the unborn child
- Target organ toxicity—may cause damage to bodily organs
- Mutagenicity—may cause genetic defects





# FLAME

- Flammables—which are gases, aerosols, liquids, or solids that will burn or ignite under certain conditions,
- Self-Reactives—heating alone, without air, may cause fire or explosion,
- Pyrophoric—in small amounts, may ignite within 5 minutes after contact with air,
- Self-Heating—which may catch fire only in large amounts and after long periods of time when exposed to air,
- Organic peroxides—which, when heated, may cause fire or explosion; may be sensitive to impact or friction; and may react dangerously with other chemicals.



## EXCLAMATION MARK

- Irritant—irritates the skin or eyes;
- Skin sensitizer—which is an allergic response following skin contact;
- Acute toxicity—which may be fatal or cause organ damage from a single short-term exposure;
- Narcotic effects like drowsiness, lack of coordination, and dizziness; and
- Respiratory tract irritation.



## GAS CYLINDER

- This pictogram on a chemical label means that the substance is a compressed, liquefied, or dissolved gas under pressure at 29 pounds per square inch or more.



## FLAME OVER CIRCLE

- This symbol on a chemical label means that the substance is an oxidizer. Oxidizers may cause a fire by increasing the concentration of oxygen in the air.
- Think West, Texas explosives. Fertilizers released concentrated oxygen and nitrogen. When the fire hit it, **BOOM!!!!**



# CORROSION

- This pictogram on a chemical label means that the substance causes skin burns, eye damage, or destroys metals.





# SKULL AND CROSSBONES



Johnny Depp Movies Are Now Showing

## SKULL AND CROSSBONES

- Substances with a hazard of acute toxicity will have this symbol on their chemical label. Acute toxicity means that exposure to a single dose of the chemical may be toxic or fatal if inhaled or swallowed, or if it comes into contact with the skin.



## EXPLODING BOMB

- Explosives—which is a solid or liquid chemical capable of a chemical reaction that causes damage to the surroundings,
- Self-Reactive—heating may cause fire or explosion without the need for air, or
- Organic peroxides—again, heating may cause fire or explosion.



## ENVIRONMENT

- This non-mandatory pictogram means the hazard the chemical presents is aquatic toxicity.



## SAFETY DATA SHEETS (SDS)

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- Section 1: Product 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 Considerations
- Section 14: Transport Information
- Section 15: Regulatory Information
- Section 16: Other Information



# SDS EXAMPLE



Acid-Rite® Tablets



**Safety Data Sheet**

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**Section 1: Identification**

**Product identifier**  
**Product Name** - Acid-Rite® Tablets  
**Relevant identified uses of the substance or mixture and uses advised against**  
**Recommended use** - Water treatment  
**Details of the supplier of the safety data sheet**  
**Manufacturer** - Axiall, LLC  
 2801 Post Oak Blvd., Suite 600  
 Houston, TX 77056  
 United States  
 www.westlake.com  
 SDSinfo@westlake.com  
**Telephone (General)** - +1 713-960-9111

**Emergency telephone number**  
**Manufacturer** - +1 304-455-6882


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**Section 2: Hazard Identification**

**UN GHS Revision 3**  
 According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Third Revised Edition

**Classification of the substance or mixture**  
**UN GHS** - Acute Toxicity Oral 5  
 Skin Corrosion 1C  
 Serious Eye Damage 1

**Label elements**  
**UN GHS**

**DANGER**  


**Hazard statements** - May be harmful if swallowed  
 Causes severe skin burns and eye damage.  
 Causes serious eye damage

**Precautionary statements**  
**Prevention** - Do not breathe mist/vapours/spray.  
 Wash thoroughly after handling.  
 Wear protective gloves/protective clothing/eye protection/face protection.

Preparation Date: 15/May/2015  
 Revision Date: 12/Oct/2018  
 Format: GHS Language: English (US)  
 UN GHS Revision 3, OSHA HCS 2012, WHMIS 2015

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## ALTERNATE LABELING SYSTEM §295.6. – LABELING OF CONTAINERS

- Employers may use an alternate labeling system to communicate hazardous chemical hazards. Examples include the NFPA 704m Standard, the Hazardous Material Information System (HMIS); and the U.S. Department of Transportation shipping label.

