

## HAZARD COMMUNICATION

A Hazard Communication (HAZCOM) program is designed to protect workers from chemical hazards in the workplace. The Occupational Safety and Health Administration, or OSHA, requires employers to provide labels and safety data sheets for every hazardous chemical that is present in their workplace. Employers must also train their employees on the HAZCOM standard before they can begin work around chemical hazards. HAZCOM programs are particularly important in the oil and gas industry, where workers are regularly exposed to harmful, even potentially fatal chemical hazards.

### HAZCOM CONTENTS

HAZCOM plans summarize the steps that the employer is taking to prevent workers from contacting hazardous chemicals. HAZCOM plans must include information about the labels and warnings used in the work environment, a list of all chemical hazards found in the workplace, appropriate personal protective equipment (PPE), training requirements, and the location of safety data sheets.

### LABELING REQUIREMENTS

OSHA uses the Globally Harmonized System, or GHS, to classify and label chemicals. GHS labels must have pictograms, a hazard statement, a precautionary statement, a signal word, a product identifier, and the name, address, and telephone number of the manufacturer or importer. Sometimes, chemicals may be labeled with Department of Transportation (DOT) labels or National Fire Protection Association (NFPA) labels. All workers must be trained on the labels used in their workplace before they can begin work around hazardous chemicals.

### SAFETY DATA SHEETS

Although Labels provide a broad overview of a hazardous chemical's properties. For more in-depth information about the chemical, workers should consult the chemical's safety data sheet, or SDS. Validus Energy maintains Safety Data Sheets for all chemicals in the chemical inventory list at [www.validus.energy](http://www.validus.energy) under the "Right To Know" tab. The Validus Safety Data Sheets are all provided with the following information:

Chemical identification  
Hazard identification  
Composition/information on ingredients  
First-aid measures  
Transport information  
Regulatory information

Fire-fighting measures  
Accidental release measures  
Handling and storage  
Exposure controls & Personal Protection  
Disposal considerations  
Stability & reactivity

Personal protection  
Physical & Chemical Properties  
Ecological information  
Toxicological information  
Other information

**Contractors who provide services to Validus Energy and who's employees work around chemicals are required to have a Hazard Communication Plan to protect their employees from chemical hazards. HAZCOM plans must include labeling information, training programs, safety data sheets, a list of all chemicals used in the workplace, and appropriate PPE.**

**Validus energy maintains a Chemical Inventory Log and Safety Data Sheets for all known chemicals at [www.validus.energy](http://www.validus.energy) under the RIGHT TO KNOW tab. If you are aware of a chemical that is not in the Chemical Inventory, please complete a Chemical SDS Request at [Validus.energy](http://Validus.energy)**

<p><b>Health Hazard</b></p>  <ul style="list-style-type: none"> <li>• Carcinogen</li> <li>• Mutagenicity</li> <li>• Reproductive Toxicity</li> <li>• Respiratory Sensitizer</li> <li>• Target Organ Toxicity</li> <li>• Aspiration Toxicity</li> </ul>	<p><b>Flame</b></p>  <ul style="list-style-type: none"> <li>• Flammables</li> <li>• Pyrophorics</li> <li>• Self-heating</li> <li>• Emits Flammable Gas</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>	<p><b>Exclamation Mark</b></p>  <ul style="list-style-type: none"> <li>• Irritant (skin and eye)</li> <li>• Skin Sensitizer</li> <li>• Acute Toxicity (harmful)</li> <li>• Narcotic Effects</li> <li>• Respiratory Tract Irritant</li> <li>• Hazardous to Ozone Layer (Non-Mandatory)</li> </ul>
<p><b>Gas Cylinder</b></p>  <ul style="list-style-type: none"> <li>• Gases Under Pressure</li> </ul>	<p><b>Corrosion</b></p>  <ul style="list-style-type: none"> <li>• Skin Corrosion/Burns</li> <li>• Eye Damage</li> <li>• Corrosive to Metals</li> </ul>	<p><b>Exploding Bomb</b></p>  <ul style="list-style-type: none"> <li>• Explosives</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>
<p><b>Flame Over Circle</b></p>  <ul style="list-style-type: none"> <li>• Oxidizers</li> </ul>	<p><b>Environment (Non-Mandatory)</b></p>  <ul style="list-style-type: none"> <li>• Aquatic Toxicity</li> </ul>	<p><b>Skull and Crossbones</b></p>  <ul style="list-style-type: none"> <li>• Acute Toxicity (fatal or toxic)</li> </ul>