



Occupational Hygiene Process

Fuels & Lubricants – Hazard Communication (HazCom) Procedure

**Approved: November 2021
Release 1.0**

©2021 by Chevron Corporation

This document contains proprietary information of Chevron Corporation. Any use of this document without express, prior, written permission from Chevron Corporation and/or its affiliates is prohibited.

Contents

Overview	1
Procedure Steps.....	2
1. Maintaining an Inventory of Hazardous Chemicals	2
2. Maintaining Safety Data Sheets (SDSs).....	3
3. Labeling Containers of Hazardous Chemicals	4
4. Training the Workforce	4
5. Managing Contractors	5
6. Obtaining Additional Information.....	6
Roles and Responsibilities	6
Document Reference List	6
Document Control Information.....	6
Document Change History	7
Appendix A: Terms and Definitions	7
Appendix B: Globally Harmonization System (GHS) and its labeling six key elements	
Appendix c: GHS safety data sheets minimum required information	

Overview

While applicable globally, the Chevron Fuels & Lubricants (F&L) Hazard Communication (HazCom) procedure is aligned with the United States Occupational Safety & Health Administration's (US OSHA's) uniform industry requirements for assuring that the hazards of all hazardous chemicals brought, produced, or used in the workplace are evaluated, and that the hazard information and associated protective measures are communicated to potentially exposed employees.

Defined very broadly by US OSHA, a hazardous chemical is as any substance that is either a physical hazard or a health hazard.

US OSHA regulations require facilities to have an effective Hazard Communication (HazCom) procedure that satisfies the US OSHA Hazard Communication Standard (29 CFR 1910.1200) or similar standards. Long-standing Chevron policies require that all facilities have procedures that inform employees about the hazards of the chemicals they handle.

This procedure meets the following requirements:

- Maintaining an inventory of hazardous chemicals
- Maintaining Safety Data Sheets (SDS)
- Labeling containers of hazardous chemicals
- Training the workforce
- Managing contractors
- Maintaining a written HazCom procedure

cope

In-Scope

This procedure applies to all *F&L* employees and contractors that may potentially be exposed to hazardous substances under normal working conditions.

Each affected person must be informed of:

- the hazardous chemicals in the workplace
- the hazardous properties of the chemicals
- the physical and health effects of the chemicals
- measures to be taken for safe handling and use of these chemicals
- emergency procedures if someone is exposed to the chemicals

Each person must also be informed of the hazards associated with non-routine tasks, such as the cleaning of vessels, and the hazards associated with chemicals in unlabeled pipes and vessels.

Out-of-Scope

This procedure does not apply to a product that is used in the workplace in the same manner (for the same purpose) as a consumer would normally use it outside the workplace.

Under this definition, the duration and frequency of exposure to the product in the workplace are not greater than normal consumer usage outside the workplace. Therefore, these chemicals are outside the scope of this procedure.

OE Expectation Met

This process meets OE Expectation 3.2

A comprehensive safety program is in place for each location. Core elements of the program shall include:

- A hazardous chemicals communication (HazCom) program to manage and communicate hazards

Procedure Steps

1. Maintaining an Inventory of Hazardous Chemicals

Each facility must maintain a printed or electronic list/inventory of hazardous chemicals, e.g., additives, solvents, cleaners, finished products, etc., as defined by the SDS representative of that individual material/product. The inventory must be reviewed at least annually to ensure that it reflects the hazardous chemicals present at the facility.

The minimum information required in the Chemical Inventory List includes:

- Product/Description
- Manufacturer
- CAS #
- SDS
- Hazardous (Y/N)
- Hazardous Property/Component (both Physical and Health)
 - Flammable
 - Toxic
 - Corrosive

 - Reactive
 - Radioactivity
- Department/Area
- Maximum Quantity
- Last Updated

NOTE: For those facilities that do not currently have a Chemical Inventory Listing in-place, please use the template ([link](#)) provided with this minimum listing of information. This template can be modified relative to facility requirements by adding columns to the right of column 'O', "Last Updated". For those facilities where a Chemical Inventory List is in-place, the facility can either adapt the Lubricants template list or review their current list against the template document to ensure that all information on the 'template' is included in their list.

A current SDS/MSDS for each hazardous chemical must be readily accessible to those individuals in the areas where they are being used or stored. This can be done either in hardcopy format or electronically.

Who Must Identify Hazardous Chemicals

The responsibility for determining whether a chemical is hazardous lies with the chemical manufacturer or importer of the chemical. As a user of chemicals, you may rely on the evaluation received from these suppliers through labels on containers and *SDS or*

To identify the hazardous chemicals in your workplace that comply with the US OSHA Hazard Communication Standard, review your work location and list the names of chemicals that have a label indicating a potential hazard (for example, "flammable" or "causes skin irritation") in the facility's Chemical Inventory List. This must not be limited to chemicals in containers and pipelines. Be aware of substances generated in work operations such as fumes or dusts, as these may be covered too.

Which Chemicals Are Hazardous

Refer to the current SDS to determine which substances within the facility are categorized as 'hazardous'.

Chemicals considered to be hazardous are those:

- Regulated by US OSHA Standard 29 CFR Part 1910, Subpart Z, Toxic and Hazardous Substances
- Included in the American Conference of Government Industrial Hygienists (ACGIH) latest edition of Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment
- Found to be suspected or confirmed carcinogens by the National Toxicology Program in the latest edition of the Annual Report on Carcinogens, or by the International Agency for Research on Cancer (IARC) in the latest edition of their IARC Monographs

How to Name Hazardous Chemicals on the Inventory

All hazardous chemicals are identified on the inventory using the same identity that appears on its corresponding SDS and label for that chemical.

The inventory may also include common or trade names, Chemical Abstract Service (CAS) Registry numbers, SDS reference numbers, etc.

2. Maintaining Safety Data Sheets (SDS)

SDSs provide employees with specific information on the chemicals they use. SDS for each hazardous chemical present at F&L facilities must be readily available to employees at their workplace.

An SDS must be received the first time a product is received at a F&L facility and with the first shipment after the SDS is updated or changed. If a chemical is received without an SDS and a current SDS is not available, immediate steps shall be taken to locate one. The chemical shall not be used until the SDS is on location. Employees receiving SDS with shipments must forward them to the work location wherein the product will be used.

Contractors must provide F&L employees with SDSs of chemicals brought into the workplace while doing work on Chevron locations. F&L must provide contractors with SDS of chemicals in the workplace to which they will potentially be exposed.

An SDS must accompany any chemical or empty container returned to the vendor.

Acquiring and Maintaining MSDS

The person in charge is responsible for acquiring and updating SDSs.

If the chemical is a Chevron product, then the person in charge must acquire or update that chemical's SDS by accessing the Chevron's On-line database for SDSs used to store this information.

If the chemical is a non-Chevron product (for example, a chemical from a vendor), then the person in charge must contact the chemical manufacturer or vendor when:

- additional research is necessary
- an SDS has not been supplied with the first chemical shipment
- there is missing information on the SDS

The person in charge must ensure that an up-to-date Hazardous Chemicals Inventory list is in place with an SDS for every substance on the Inventory List available (either electronic or hard copy).

Chevron's SDS Online database is an option for storing non-Chevron SDS (purchased products).

New SDSs must be reviewed by employees before handling the chemical or putting the chemical in use.

3. Labeling Containers of Hazardous Chemicals

The person in charge must ensure that Hazcom training has been conducted with appropriate personnel at the facility, to include their responsibilities regarding conformance with the requirement that all containers of hazardous chemicals identified by the HazCom procedure are properly labeled and updated, as necessary.

It is the responsibility of the employee shipping or receiving a shipment of a hazardous chemical to check all product and warning labels to ensure that this information is present and legible.

If no label is present, the container must not be released for use until the chemical is identified and the container labeled as per this process.

Label Information and Placement

Labels must include:

- Chemical identity
- Appropriate signal word(danger or warning)
- Hazard statement (e.g., highly flammable liquid or vapor)
- Pictograms (See Appendix B)
- Precautionary statement (i.e., keep container closed, wear PPE.)
- Name and address of the manufacturer, importer, or other responsible party

Refer to Appendix B for Globally Harmonized System (GHS) label minimum required information.

When drums are used for shipment, the appropriate information should be labeled on the top and on the side of the drums to aid in quick product identification.

Labels must be updated when products change, or new information becomes available. Damaged or illegible labels must be replaced as soon as possible.

When a hazardous chemical is transferred to a portable container (for example, a bucket), the portable container must be labeled with the chemical name and the appropriate warning labels. The only exception to this is when the chemical is to be used immediately by the person (that is, on the same work shift) making the transfer in which case no labeling is required.

The identity and appropriate hazard warnings for hazardous chemicals stored in stationary containers/tanks must be identified either by labels fixed on the tanks or by using signs, placards, procedures or other written materials readily accessible by workers in their work area throughout each work shift.

Pipes or piping systems need not be labeled but their contents and related hazards must be described in training sessions and/or pre-job safety briefings.

4. Training the Workforce

All employees who work with or are potentially exposed to hazardous chemicals must attend training and receive follow-up communications as follows:

- Initial training on the F&L HazCom procedure and the safe use of hazardous chemicals
- Additional training and/or communications regarding the details of the Hazard Communication Program such as location and availability of this HazCom procedure, SDSs, and the Hazardous Chemicals Inventory; how to read and interpret the

information on both labels and *SDSs*; and how employees may obtain additional hazard information

- Additional training and/or communications whenever a new hazard is introduced
- Regular safety meetings that include information presented in the initial HazCom training

Responsibility for Training and for Monitoring Work Practices

The person in charge at each work location must ensure that all workforce members know where to find *SDSs*, the chemical inventory list, and this HazCom procedure 2.2.6.

[An individual \(or individuals\) must be assigned and responsible for managing all training requirements at each facility.](#)

Periodic review of the employee training program must be performed. As part of the assessment of the training program, input from employees must be obtained regarding the training they have received and their suggestions for improving it.

Current training records, demonstrating compliance with this procedure, must be accessible at the facility.

Training Plan Emphasis

The training plan must emphasize these items:

- Chemical and physical properties of hazardous materials (for example, flash point and reactivity), and methods and observations that can be used to detect the presence or release of chemicals (including chemicals in unlabeled pipes)
- Physical hazards of chemicals (for example, potential for fire, explosion, etc.)
- Health hazards of chemicals, including signs and symptoms of exposure, associated with exposure to chemicals and any medical condition known to be aggravated by exposure to the chemical
- Procedures to protect against hazards (for example, personal protective equipment required, proper use and maintenance; work practices or methods to assure proper use and handling of chemicals; and procedures for emergency response)
- Work procedures to follow to assure protection when cleaning hazardous chemical spills and leaks

Comprehensive training material is available within the Chevron Learning Management System (LMS) under the title of “Hazard Communications.” The material is configured in an eLearning, self-paced format.

Training for Non-Routine Tasks

When non-routine tasks require the use of hazardous chemicals (for example, cleaning tanks or entering confined spaces), a pre-job safety briefing, as required by Chevron Managing Safe Work (MSW) standards, must be conducted to inform each employee of the hazardous chemicals to which they might be exposed and the proper precautions to take to reduce or avoid exposure.

5. Managing Contractors

The person in charge must ensure that contractors are informed of the hazardous chemicals their employees may be exposed to while working on Chevron property. The person in charge of the facility is responsible for ensuring that:

- The identity of any hazardous chemical is communicated to contractors or visitors who may be exposed while working at the location

- Contractors are informed of the labeling system in use, the protective measures to be taken, the safe handling procedures to be used, and the location and availability of SDSs while working on Chevron locations
- Chemical identities and SDSs on hazardous chemicals the contractor may bring onto Chevron locations are obtained, and the employees at the location are informed of the associated hazards of each chemical.

6. Obtaining Additional Information

All employees can obtain further information on this HazCom procedure, the US OSHA Hazard Communication Standard, applicable SDSs, labeling hazardous chemicals, the Hazardous Chemicals Inventory by contacting their HES representative.

Roles and Responsibilities

The following table outlines the roles and responsibilities associated with this procedure.

Table 1: Roles, Responsibilities and Competencies

Role	Responsibilities	Competencies
Person in Charge <i>(in most facilities, this will be the Lab Supervisor, Lead or designee)</i>	Ensure that the requirements of this procedure are satisfied.	Understanding of the HazCom procedure and associated requirements.

Document Reference List

The following table provides a list of the documents referenced in this procedure.

Table 2: Document Reference List

Section Reference	Attachment Title	File Name
Procedure Step 1	US OSHA Standard 29 CFR 1910 Subpart Z	Standard 29 CFR 1910 Subpart Z
Procedure Step 1	Chemical Inventory List - Template	Chemical Inventory List - Template
Procedure Step 2	Chevron MSDS Online Database	MSDS Online Database
Section 4 – Training the Workforce	F&L Hazard Communication (HazCom) Training	

Document Control Information

Table 3: Document Control Information

Description	Fuels & Lubricants
-------------	--------------------

Description	Fuels & Lubricants
Approval Date	November 2021
Next Revision Due	November 2026

Document Change History

Table 4: Document Change History

Date	Author	Section Number	Change Reference
July 2021	RMM	New procedure 1.0	Document Released

Appendix A: Terms and Definitions

Term	Abbreviation	Description
Container		Includes tanks, vessels, heat exchangers, and other equipment that holds chemicals. Piping systems and the engine, fuel tank, and other operating systems in a vehicle are not considered to be containers.
Corrosive		A substance which will destroy body tissues upon contact. Fumes and vapors are generally corrosive and sometimes toxic (for example, chlorine).
Flammable		Capable of being easily set on fire. These chemicals vaporize and consequently, present an explosion hazard (for example, methanol).
Flash Point		The lowest temperature at which vapors ignite when exposed to a heat source.
Hazardous Chemical		Defined very broadly by US OSHA as any substance that is either a <u>physical</u> hazard or a <u>health</u> hazard. From a practical standpoint, just about all industrial chemicals except some light lubrication oils and chemicals consisting almost entirely of water meet US OSHA's definition of hazardous. <u>Physical hazards</u> include compressed gases; combustible liquids; explosive, flammable, pyrophoric, unstable (reactive), or water-reactive

Term	Abbreviation	Description
		<p>substances; organic peroxides; and oxidizers.</p> <p><u>Health hazards</u> include substances which at least one valid study shows to be a carcinogen, toxic or highly toxic agent, reproductive toxin, irritant corrosive sensitizer, hepatotoxin, nephrotoxin, neurotoxin, agent which acts on the hematopoietic system, or agent which damages the lungs, skin, eyes, or mucous membranes.</p>
Hazard Communication program		Same as Hazard Communication process.
Irritant		<p>A substance which causes inflammation of body tissues.</p> <p>It is recognized that many chemicals (such as solvents and paint thinner) affect individuals in varying degrees.</p>
US OSHA		The U.S. Occupational Safety and Health Administration, an agency of the U.S. Department of Labor.
Person in Charge		The designated individual at a work location responsible for all operations.
Readily Accessible		Employees and contractors have no barriers to obtaining the information. Barriers include such things as locked file cabinets, inability to access electronic files, requiring the worker to approach his/her supervisor.
Toxic		A chemical capable of causing death or serious debilitation.

Appendix B: Globally Harmonized System (GHS) and labeling










The GHS is a system for standardizing and harmonizing the classification and labeling of chemicals. It is a logical and comprehensive approach to:

- Defining health, physical and environmental hazards of chemicals.
- Creating classification processes that use available data on chemicals for comparison with the defined hazard criteria; and
- Communicating hazard information, as well as protective measures, on labels and SDSs.

Primary containers of GHS labels must have six key elements and it includes:

1. Signal Words indicate the relative degree of severity of a hazard. There are only two signal words allowed under GHS, and only one signal word can be used on a label at a time:
 - “Danger” for the more severe hazards, or
 - “Warning” for the less severe hazards
2. Pictograms on GHS labels include the harmonized hazard symbols plus borders, background patterns and colors. The pictograms are intended to convey specific information about the hazard. Pictograms do not include the GHS hazard classification numbers, and therefore will not conflict with workplace labeling (i.e., National Fire Protection Agency Diamonds).

Pictograms are commonly grouped by chemical/physical risk, health risk and environmental risk.

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

3. Supplier Identification includes the name, address, and telephone number of the manufacturer, supplier responsible party of the chemical is included here.
4. Precautionary statements are supplemental to hazard or environmental statements. They provide information on measures to be taken that can prevent adverse health effects. Some examples of precautionary statements include, but are not limited to:
 - “Do not allow contact with air”
 - “Keep cool”
 - “Obtain special instructions before use”
5. Hazard Statements are standardized phrases that describe the nature of the hazard, and if applicable the severity of the hazard. Hazard statements are canned statements for specific hazards. Some examples of hazard statements include, but are not limited to:
 - “Causes damage to kidneys through prolonged or repeated exposure when absorbed through the skin”
 - “Very toxic to aquatic life”
 - “May be fatal if swallowed and enters airways”
6. Product Identifier is the ingredient disclosure. The information on the label comes from the accepted SDS. Information should include the identity of the chemical (name, CAS etc.) For mixtures/alloys the label needs to contain all ingredients that contribute to acute toxicity, skin corrosion or serious eye damage, germ cell mutagenicity, carcinogenicity, reproductive toxicity, skin or respiratory sensitization or target organ systematic toxicity

Appendix C: GHS safety data sheets minimum required information

Under Globally Harmonized System (GHS), Safety Data Sheets (SDS) formerly known as Material Safety Data Sheets (MSDSs) are now standardized in a 16-section format document. The SDS contains information about the specific chemical and the hazards associated with that chemical. Information from the SDS can be used to characterize the workplace, identify potential hazards, and respond to incidents.

Safety Data Sheets should be supplied by the manufacturer or supplier of the chemical. If they are not supplied with the chemical, one should be requested. Safety data sheets for each location should be kept on file and easily accessible to all employees. Safety data sheets should be readily accessible to each employee during each work shift.

SDS are excellent training and reference tools. Being able to interpret the SDSs is essential for utilizing them for these purposes. Explanations of the typical information found in SDSs includes 16 sections as follows:

Section	Name	Required elements / associated information
1	Identification	<ul style="list-style-type: none"> •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.)
2	Hazard(s) identification	<ul style="list-style-type: none"> •Emergency phone number •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 black and white or the name of the symbol, e.g., flame, skull, and crossbones) •Other hazards which do not result in classification (e.g., dust explosion hazard) or are not covered by the GHS
3	Composition / information on ingredients	<ul style="list-style-type: none"> •Chemical identity •Common name, synonyms, etc. •CAS number, EC number, etc. •Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance <p>Mixture</p> <ul style="list-style-type: none"> •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
4	First-aid measures	<ul style="list-style-type: none"> •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 <p>Indication of immediate medical attention and special treatment needed, if necessary</p>
5	Fire-fighting measures	<ul style="list-style-type: none"> •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 firefighters
6	Accidental release measures	<ul style="list-style-type: none"> •Personal precautions, protective equipment, and emergency procedures •Environmental precautions •Methods and materials for containment and

		cleaning up
7	Handling and storage	<ul style="list-style-type: none"> •Precautions for safe handling •Conditions for safe storage, including any incompatibilities
8	Exposure controls / personal protection	<ul style="list-style-type: none"> •Control parameters, e.g., occupational exposure limit values or biological limit values •Appropriate engineering controls •Individual protection measures, such as personal protective equipment
9	Physical and chemical properties	<ul style="list-style-type: none"> •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 limit •Vapor pressure •Relative density •Solubility •Partition coefficient: n-octanol/water •Autoignition temperature •Decomposition temperature
10	Stability and reactivity	<ul style="list-style-type: none"> •Chemical stability •Possibility of hazardous reactions •Conditions to avoid (e.g., static discharge, shock or vibration) •Incompatible materials •Hazardous decomposition products
11	Toxicological information	<p>Concise but complete and comprehensible description of the various toxicological (health) effects and the available data used to identify those effects, including:</p> <ul style="list-style-type: none"> •Information on the likely routes of exposure (inhalation, ingestions, skin, and eye contact) •Symptoms related to the physical, chemical, and toxicological characteristics. •Delayed and immediate effects and chronic effects from short- and long term-exposures •Numerical measures of toxicity (such as acute toxicity estimates)
12	Ecological information	<p>Ecotoxicity (aquatic and terrestrial, where available)</p> <p>Persistence and degradability</p> <p>Bio-accumulative potential</p> <p>Mobility in soil</p> <p>Other adverse effects</p>
13	Disposal considerations	<ul style="list-style-type: none"> •Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging
14	Transport information	<ul style="list-style-type: none"> •UN Number •UN Proper shipping name •Transport Hazard class (es) •Package group, if applicable •Marine pollutant (Yes/No) •Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premise
15	Regulatory information	<ul style="list-style-type: none"> •Safety, health, and environmental regulations specific for the product in

16

Other information

question
•Including information on preparation and revision of the SDS