



CONTROLLING CHEMICAL HAZARDS

Guidance Sheet

IMPORTANT HSE TOPICS

WHMIS 2015 (GHS)

Background

Workplace Hazardous Material Information System (WHMIS) has been updated to incorporate the Global Harmonization System (GHS). This updated system for managing hazardous products is referred to as WHMIS 2015 and provides a slightly different way of classifying and labeling hazardous products. The new WHMIS is referred to as WHMIS 2015 and replaces the existing WHMIS now called WHMIS 1988.

WHMIS 2015 establishes a harmonized, global manner to classify hazardous products. This will ensure that what is considered hazardous in one country is considered hazardous in another country and what is considered hazardous in WHMIS is considered hazardous in another system, such as Transportation of Dangerous Goods (TDG).

WHMIS 1988	WHMIS 2015
(No GHS)	(Includes GHS)

When did it come into Effect?

WHMIS 2015 was passed into law at the federal level on February 11, 2015. The regulations are now referred to as the Hazardous Products Act and Regulations.

WHMIS 2015 is now in effect!

What is the Transition Plan?

A transition plan is now in place. All suppliers must have Safety Data Sheets (SDS) and supplier labels in place by June 1, 2017. By December 1, 2018 all of Canada must be transitioned over to WHMIS 2015.

If you are a supplier you have until June 1, 2017

If you are an employer or worker you have until December 1, 2018

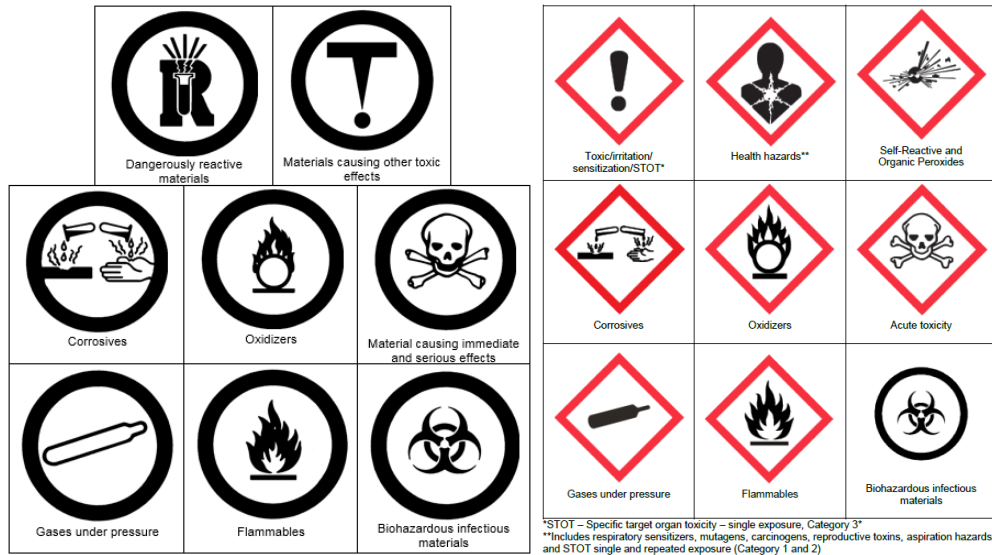
What are the Changes?

Hazard identification and classification - New classification criteria and different hazard classes exist for both health and physical hazards. As a result, some products that were not classified under WHMIS 1988 are classified under WHMIS 2015. An example is Category 2 flammable gases, such as anhydrous ammonia, which is now considered to be flammable under WHMIS 2015. These changes have an impact on Safety Data Sheets, previously referred to as Material Safety Data Sheets (MSDS). Hazard classification and the resulting label and hazard statements are now tiered based on risk.

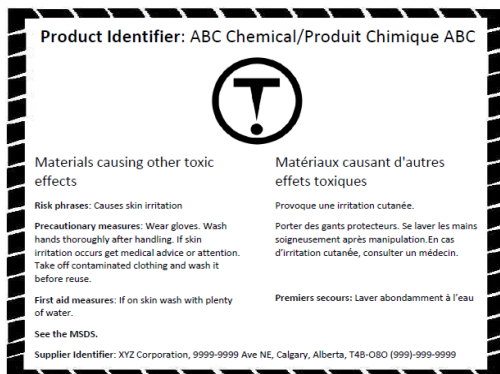
SDS - A new 16-section format combined with new hazard and precautionary statements, 12 sections of which are mandatory requirements. The optional sections are Ecological Information, Disposal Considerations, Transportation Information and Regulatory Information. WHMIS 2015 removes the requirement for SDSs to be revised every three years; however, Provincial regulators may choose to retain the three year revision.

9-Section MSDS	16-Section SDS
WHMIS 1988	WHMIS 2015

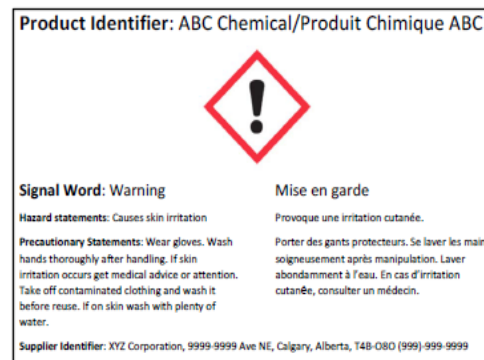
Pictograms - Several new pictograms exist with WHMIS 2015. The dangerously reactive compounds pictogram no longer exists in WHMIS 2015. All pictograms are now red diamonds on point to align with TDG placard symbols. One exception exists in Canada, which is the retention of the biohazard pictogram. This pictogram will continue as the black circle.



Labels - Labels no longer have the cross hatched border. Due to the tiered risk approach some labels may look different (e.g. no longer have a pictogram). Examples include Category 4 flammable liquids, which do not require a pictogram. Supplier labels also have Signal Words such as “Danger” and “Warning” in addition to Hazard Statements formerly called Risk Phrases. Workplace labels are regulated under the provincial legislation, such as the Alberta OHS Code or WorkSafeBC OHS Regulation.



WHMIS 1988 Supplier Label



WHMIS 2015 Supplier Label

GHS is referred to as WHMIS 2015

- WHMIS 2015 became law in Canada on February 11, 2015
- WHMIS 2015 harmonizes classification and communication requirements
- Suppliers have until June 1, 2017 to transition over to WHMIS 2015
- SDSs need to be prepared with the new classification criteria
- New pictograms and signal words exist
- WHMIS 2015 and TDG flammability criteria are now aligned
- Take this opportunity to evaluate your chemical related programs
- Some differences still remain between Canada and the USA
- Workers must be trained on WHMIS 2015 if WHMIS 2015 hazardous products (SDSs and labels) are present in the workplace.

Alignment with TDG

Liquid flammability is one example of harmonization that will show up in your workplace. The liquid flammability classifications for WHMIS are now aligned with TDG. A WHMIS 2015 Category 1 flammable liquid product is the same as a TDG Packing Group I. Under WHMIS 2015 something that is flammable in the truck is also flammable when used in the workplace, which was not always the case in WHMIS 1988. The aligned liquid flammability classification categories are presented below.

Classification Elements		Hazard Statement	WHMIS 2015	TDG
Flash Point*	Boiling Point			
<23°C	≤35°C**	Extremely flammable	Category 1	Packing Group I
<23°C	>35°C	Highly flammable	Category 2	Packing Group II
≥23°C and ≤60°C	>35°C	Flammable	Category 3	Packing Group III
>60°C - ≤93°C	N/A	Combustible	Category 4***	N/A***

* - closed-cup method, ** - TDG regulations currently indicate “Any” flash point

*** - provided temperature of liquid is less than flash point

Given the increased focus on TDG in oil and gas the harmonization changes of WHMIS 2015 are welcomed to ensure clear language. This is also a good opportunity to conduct a gap assessment on your company’s WHMIS, TDG, and chemical management programs and make any necessary improvements.

Differences between Canada and USA

Despite the alignment benefits of WHMIS 2015, some differences still exist between Canada and the USA. Some examples of these differences are:

- » Canadian requirement for French and English labels and SDSs
- » Category 2 carcinogens between 0.1% and 1% in the USA do not require a label, but do require one in Canada
- » Biohazards are included in Canada, but not in the USA

For more information on these and other differences please refer to the Hazardous Products Act and Regulations.

So what does WHMIS 2015 mean for me?

Supplier - If you are a supplier it means that you need to do the following:

- » Re-classify your products
- » Create or update SDSs; you have until June 1, 2017 to make this change
- » Update supplier labels once you have converted over to SDSs

Employer - If you are an employer, you need to:

- » Update SDS inventories as new SDS are received
- » Train your workers on WHMIS 2015 when WHMIS 2015 SDSs and/or labels are present in your workplace or by December 1, 2018.
- » Update workplace labels to be WHMIS 2015 compliant when WHMIS 2015 products are present in your workplace and when provincial legislation is updated. Labels can exist in many locations in the upstream oil and gas industry such as:
 - Storage tanks and vessels such as crude, condensate and liquid petroleum gases (LPG)
 - Drilling mud storage tanks
 - Acid storage and flow back tanks on hydraulic fracturing sites
 - Gasoline and diesel fuel storage containers used throughout the industry
 - Miscellaneous chemicals used throughout the industry such as methanol, inhibitors, etc.

Worker - If you are a worker you need to become familiar with WHMIS 2015 and participate in your employers WHMIS 2015 program, training and transition plan.

Please consider that it is possible for any company to have all three types of roles and responsibilities (supplier, employer and worker). For answers to other questions you may have, please see the attached frequently answered questions.

Disclaimer

The above information and examples are provided to illustrate some of the WHMIS 2015 changes. This document is not a replacement for a comprehensive assessment of the impacts of WHMIS 2015. As a result, every supplier and employer must conduct their own assessment of the impacts of this regulatory change and manage the risks accordingly.

Frequently Asked Questions (FAQ)

1. As a supplier, when do I have to be transitioned over to WHMIS 2015?

Answer: June 1, 2017.

2. How do I classify my products and create SDSs?

Answer: The Hazardous Products Act and Regulation can provide detailed assistance in this regard. Classification will likely involve laboratory testing and may require the assistance of specialists using classification databases. Please note that the classification criteria have changed significantly and products may now be included in new class categories under WHMIS 2015 that were not previously included in WHMIS 1988.

3. If I am using Hazardous Products that have WHMIS 2015 labels and/or SDSs, do my Employees require training?

Answer: Yes. If WHMIS 2015 hazardous products are present in your workplace, workers need to be familiar with WHMIS 2015.

4. What are the risks if my workers are not trained in WHMIS 2015?

Answer: Changes to labels including pictograms could pose a risk to workers who have not been trained and to other workers on the workplace. Examples include:

- » not recognizing products as hazardous products, because the label does not have the crosshatched border
- » not recognizing some fire risk with a Category 4 flammable, because it no longer requires a flame pictogram

5. As an employer, how do I train my workers?

Answer: A variety of training options are available including classroom courses and online courses. Enform offers WHMIS 2015 training as well as a Toolbox Talk on WHMIS 2015. Both can be found at enform.ca.

6. What are the workplace label requirements?

Answer: Workplace label requirements are not under the jurisdiction of the Federal Hazardous Products Act and Regulations, but are under the jurisdiction of the Provincial governments (e.g. Alberta OHS). Provincial governments are currently updating their legislation. It is your responsibility to monitor and understand when new provincial legislation is in force. In general, workplace labels must have the following:

- » Product identifier
- » Information on the safe handling of the hazardous product
- » Reference to the SDS

7. How do I obtain WHMIS 2015 labels?

Answer: WHMIS 2015 supplier labels are different than WHMIS 1988 and will require replacement. Companies can create their own labels that meet the requirements of the legislation or they can obtain assistance from SDS preparation companies or sign and label companies.