WHMIS Safety Data Sheet (SDS) Compliance Game Plan

The Workplace Hazardous Material Information System (WHMIS) is a scheme designed to protect workers from hazardous chemicals and materials found in the workplace. While provinces and territories have slightly different WHMIS rules in their OHS regulations, basic WHMIS requirements come from federal law and apply in all parts of Canada. The key laws are the *Hazardous Product Act* (HPA) and *Hazardous Product Regulations* (HPR). The point of WHMIS is to ensure that workers know about the "hazardous products" they use or work near and how to protect themselves against the danger.

The Safety Data Sheet ("SDS") is a central element of the WHMIS system. It's a summary document created by the company that produces or supplies the hazardous product that lists key information about the hazards the product poses, how to use it safely, and how to respond if spills or emergencies involving the product occur. WHMIS regulations set out the rules employers must follow to ensure exposed workers have access to and know how to use SDSs. Here's a 9-step Game Plan you can use to ensure compliance with SDS requirements.

Step 1. Determine Which Hazardous Products Require an SDS

Basic Rule: Employers must ensure that there's an SDS for any

“hazardous product” that’s used, handled, or stored in the workplace. A “hazardous product” means a product, mixture, material, or substance that’s classified as a health or physical hazard under criteria listed in the HPR. That includes things like flammables, biohazards, acids, etc. But exceptions apply, especially to dangerous products that are regulated under different federal laws. WHMIS and SDS requirements don’t apply to:

- Explosives regulated under the *Explosives Act*;
- Cosmetics, devices, drugs, or food regulated under the *Food and Drugs Act*;
- Pest control products regulated under the *Pest Control Products Act*;
- Consumer products as defined in the *Canada Consumer Product Safety Act*;
- Nuclear substances under the *Nuclear Safety and Control Act*, that are radioactive;
- Wood or products made of wood;
- Hazardous waste that’s a hazardous product sold for recycling or recovery, or intended for disposal;
- Tobacco and tobacco products regulated under the *Tobacco and Vaping Products Act*; and
- Manufactured articles.

Compliance Strategy: Have one or a team of competent persons carry out an inventory of all of the hazardous products found in your workplace. Be sure to keep your hazardous products inventory as old products are replaced and new hazardous products are introduced.

Step 2. Get a Supplier SDS for Each Hazardous Product in the Workplace

You must have an appropriate SDS for each hazardous product listed in your inventory. How you obtain the SDS depends on how the hazardous product got to your workplace. If, like most

employers, you got the hazardous product from an outside supplier, you must get the SDS directly from the supplier at the time you receive the product. **Note:** If instead of obtaining the hazardous product from a supplier you actually produced it, skip this and go to Step 4.

Compliance Strategy: The good news is that you probably won't have to twist any arms to do this. That's because the HPA requires suppliers of hazardous products to furnish what's called a supplier SDS when transferring the product to a customer. And the employer doesn't have to get a supplier SDS if the supplier happens to be exempt from HPA supplier SDS requirements.

But if a supplier SDS is required and the supplier doesn't provide it, you can't use it unless and until you get the SDS from the supplier. Federal and Alberta OHS laws allow employers to at least store the hazardous product in the workplace without an SDS as long as they make reasonable efforts to acquire the SDS from the supplier. However, in Alberta, the storage exception applies for only 120 days.

Step 3. Consider Using Alternate Format SDS

Normally, you maintain the supplier SDS in the format in which the supplier provided it. However, employers are allowed to alter the format of a supplier SDS.

Compliance Strategy: Using an alternative format SDS is okay, provided that:

- The alternative format SDS contains at least as much information as the original supplier SDS;
- You make the original supplier SDS readily available at the workplace to workers who may ask to see it; and
- You say in the alternative format SDS that the original

supplier SDS is available for workers to review upon request.

There are also some slight variations on these basic rules in some jurisdictions:

- **Federal:** The alternative format SDS can't contradict the original supplier SDS, and the employer must consult with the JHSC or safety representative on the format in which the original supplier SDS must be kept; and
- **NL/NS/SK/3 Territories:** The alternative format SDS may contain less information than the original supplier SDS as long as the JHSC or safety rep are aware of and approve the difference in information.

Step 4. Create Workplace SDS for Every Hazardous Product You Produce

The employer must actually prepare an SDS for any hazardous product that it produces. This employer-prepared SDS is called a "workplace SDS."

Compliance Strategy: A workplace SDS isn't required if the hazardous product is produced via a so-called "fugitive emission" or is an "intermediate product" undergoing reaction within a reaction or process vessel. In addition, in BC, New Brunswick, Northwest Territories, Nunavut, Prince Edward Island, Québec, and Saskatchewan, employers that prepare a workplace SDS must disclose the source of the toxicological data on which they based the SDS at the request of a JHSC, safety rep, worker, or government OHS official.

Step 5. Ensure SDS Includes All Required Information

The employer must ensure that the SDS, whether it's a supplier

SDS or workplace SDS, contains all of the information elements listed in Schedule 1 of the HPR, including the section number and headings in the proper order:

Required Information Elements of an SDS

	SDS Section & Heading	**Required Information Elements**
1	Identification	• Product identifier (e.g., Product name) • Other means of identification (e.g., product family, synonyms, etc.) • Recommended use • Restrictions on use • Canadian supplier identifier+ - Name, full address and phone number(s) • Emergency telephone number and any restrictions on the use of that number, if applicable++

	SDS Section & Heading	Required Information Elements
2	Hazard Identification	• Hazard classification (class, category or subcategory) of substance or mixture or description of identified hazard for Physical or Health Hazards Not Otherwise Classified • Label elements: - Symbol (image) or the name of the symbol (e.g., flame, skull and crossbones) - Signal word - Hazard statement(s) - Precautionary statement(s) • Other hazards which do not result in classification (e.g., molten metal hazard) NOTE: Information elements are specified for: combustible dusts, simple asphyxiants, physical hazards not otherwise classified, chemicals under pressure, biohazardous infections materials, and health hazards not otherwise classified.

	SDS Section & Heading	Required Information Elements
3	Composition/Information on Ingredients	• When a hazardous product is a material or substance: - Chemical name - Common name and synonyms - Chemical Abstract Service (CAS) registry number and any unique identifiers - Chemical name of impurities, stabilizing solvents and/or additives* • For each material or substance in a mixture that's classified in a health hazard class**: - Chemical name - Common name and synonyms - CAS registry number and any unique identifiers - Concentration NOTE: Confidential business information rules may apply.
4	First Aid Measures	• First-aid measures by route of exposure: - Inhalation - Skin contact - Eye contact - Ingestion • Most important symptoms + effects (acute or delayed) • Immediate medical attention + special treatment, if necessary.

	SDS Section & Heading	Required Information Elements
5	Fire-Fighting Measures	• First-aid measures by route of exposure: - Inhalation - Skin contact - Eye contact - Ingestion • Most important symptoms + effects (acute or delayed) • Immediate medical attention + special treatment, if necessary.
6	Accidental Release Measures	• Personal precautions, protective equipment and emergency procedures • Methods and materials for containment and cleaning up.
7	Handling & Storage	• Precautions for safe handling • Conditions for safe storage (including incompatible materials).
8	Exposure Controls/Personal Protection	• Control parameters, including occupational exposure guidelines or biological exposure limits and source of those values • Appropriate engineering controls • Individual protection measures, e.g., PPE.

	SDS Section & Heading	Required Information Elements
9	Physical & Chemical Properties	• Physical state • Colour • Odour • Melting point and Freezing point • Boiling point, or initial boiling point and boiling range • Flammability • Lower flammable or explosive limit • Upper flammable or explosive limit • Flash point • Auto-ignition temperature • Decomposition temperature • pH • Kinematic viscosity • Solubility • Partition coefficient – n-octanol/water • Vapour pressure • Density and relative density • Relative vapour density • Particle characteristics.
10	Stability & Reactivity	• Reactivity • Chemical stability • Possibility of hazardous reactions • Conditions to avoid (e.g., static discharge, shock, or vibration) • Incompatible materials • Hazardous decomposition products.

	SDS Section & Heading	Required Information Elements
11	Toxicological Information	Concise but complete description of various toxic health effects and data used to identify effects, including: • Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact) • Symptoms related to the physical, chemical and toxicological characteristics • Delayed and immediate effects, and chronic effects from short-term and long-term exposure • Numerical measures of toxicity, including acute toxicity estimates (ATEs).
12	Ecological information***	• Ecotoxicity • Persistence and degradability • Bioaccumulative potential • Mobility in soil • Other adverse effects.
13	Disposal considerations***	Information on safe handling for disposal and methods of disposal, including any contaminated packaging.

	SDS Section & Heading	Required Information Elements
14	Transport information***	• UN number • UN proper shipping name • Transport hazard class(es) • Packing group • Environmental hazards • Special precautions.
15	Regulatory information***	Safety, health and environmental regulations specific to the product.
16	Other Information	Date of the latest revision of the SDS.

NOTES

+The supplier that must be identified on an SDS is the initial supplier identifier (i.e., the name, address and telephone number of either the Canadian manufacturer or the Canadian importer). Exceptions: 1. If a hazardous product is sold by a Canadian distributor, the distributor may replace the name, address and telephone number of the initial supplier with their own contact information; and 2. If an importer imports a hazardous product for use in their own workplace in Canada (i.e., the importer is not selling the hazardous product), the importer may retain the name, address and telephone number of the foreign supplier on the SDS instead of replacing it with their own contact information.

++The emergency telephone number must allow the caller to get information about the hazardous product. This number doesn’t have to be a Canadian telephone number. Any restrictions on the use of that number must be stated (e.g., days and hours of operation). If the language spoken at the telephone number is neither English nor French, this should be indicated on the SDS as part of the restrictions on the use of the number.

*These impurities and stabilizing products are those that are classified in a health hazard class and contribute to the

classification of the material or substance.

**Each ingredient in the mixture must be listed when it's classified in a health hazard class and is present above the concentration limit designated for the hazard class in which it's classified or present in the mixture at a concentration that results in the mixture being classified in any health hazard class. Each ingredient present in mixtures at concentrations above the relevant cut-off levels set for its category or subcategory must be disclosed, regardless of whether the hazardous ingredient contributes to the classification of the mixture as a hazardous product.

***Sections 12 to 15 require the headings to be present, but under Canadian regulations, the supplier has the option to not provide information in these sections.

Step 6. Ensure Supplier SDS Is Properly Updated

It's up to the employer to ensure that the supplier SDS is up to date. Specifically, if significant new data about any of the ingredients listed on the supplier SDS becomes available, the employer must immediately update the supplier SDS to incorporate that information.

Compliance Strategy: In 8 jurisdictions (FED, BC, NL, NS, NT, NU, SK, YK), employers must also replace any supplier SDS that's more than 3 years old. The first option is to get the supplier to send an updated SDS. If that's not reasonably practicable, the employer must update the most recent supplier SDS it has on the basis of the most recent significant new scientific about the hazardous product's disclosed ingredients, that is, the ingredients listed on the most recent supplier SDS, that's reasonably available.

Exception: In BC, Newfoundland, and Nova Scotia, an employer

can hang onto a supplier SDS that’s older than 3 years without an update, as long as:

- The supplier provides the employer written confirmation that the SDS hasn’t changed or that the up-to-date SDS doesn’t apply to the hazardous product; or
- It’s not practicable for the employer to obtain the up-to-date SDS or written confirmation from the supplier—in which case, the employer must update the supplier SDS itself on the basis of the most recent significant scientific data about the disclosed ingredients.

Step 7. Update Workplace SDS

The duty to update also applies to the workplace SDS.

Compliance Strategy: Employers that prepare a workplace SDS for a hazardous product must also up must regularly review the accuracy of the listed information and update the SDS as soon as reasonably practicable after significant new scientific information becomes available to them and within 90 days at the latest. Manitoba specifies that employers must also provide exposed workers training on that new scientific information as soon as reasonably practicable.

Step 8. Ensure SDSs Are Readily Available to Workers

Employers must make SDSs “readily available” to any worker who may be exposed to a hazardous product, as well as the JHSC or safety rep. “Readily available” basically means:

- On the worksite where the hazardous product is used, handled, or stored;
- In a physical location or computer terminal that workers can easily get to without the need for assistance, rather than, say, a locked room for which only a

supervisor has the key;
- Accessible to workers during each shift.

Compliance Strategy: Most jurisdictions (including FED, BC, NB, NL, NS, ON, PEI, and SK) require employers to consult with the JHSC or safety rep on how best to ensure the accessibility of SDSs' at the workplace. Employers are generally allowed to provide access to SDSs' as long as:

- All workers who work with or near hazardous products have access to the computer through which the SDSs' may be accessed;
- Computers are kept in working order at all times;
- Workers, JHSC members, and/or safety reps receive training on how to use the computers and any related media to access the SDSs'; and
- You keep hardcopies of SDSs' in case workers can't use the computer or otherwise can't access an SDS electronically.

Step 9. Ensure Workers Receive Training on SDSs'

Accessing and understanding the SDS should be part of the general WHMIS education and training that employers must provide to workers who work with, near, or are otherwise exposed to hazardous products. At a minimum, that training should educate workers about what the SDS is, the information it contains and how to use that information to protect their safety.

Compliance Strategy: Be sure to document that workers not only receive but understand their WHMIS and SDS training by requiring them to demonstrate competence in reading an SDS, explaining the purpose of the particular information it contains and accessing the hardcopy and/or digital system in which they're kept at your workplace.

Although the phrase “annual WHMIS training” is often used, OHS laws don’t actually require training and retraining each year. The laws require you to annually review your WHMIS training program. The training itself has no pre-determined shelf life. It lasts as long as the training remains timely and reflective of current conditions and hazards. New training is required only when and if:

- Work conditions change in a way that alters the exposure risks covered in the previous training;
- New and significant hazard information about the hazardous product becomes available after training takes place;
- Periodic evaluations indicate that workers don’t have adequate knowledge to apply their training; and/or
- There are other indications that the previous training isn’t effective and needs refreshing.