



Paul Goldin – Avmor  
**Vice President,  
Sustainability  
and Marketing**

*In Canada, an effort to enhance international consistency in safety regulations, the WHMIS 2.0 will be undergoing a transition to GHS (Global Harmonization System) in phases.*

## - Globally Harmonized System of Classification under WHMIS 2.0 -

The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) is a system that defines and classifies the hazards of chemical products, and communicates health and safety information on labels and material safety data sheets (referred to as Safety Data sheets, or SDS, in GHS). The goal is that the same set of rules for classifying hazards, and the same format and content for labels and safety data sheets (SDS) will be adopted and used around the world to help protect the human health and the environment during the handling, transport and use of these chemicals. GHS provides the basis for worldwide-standardized regulations on chemicals at the national and regional level, an important factor for trade facilitation.

At the moment all chemical manufacturers must abide by specific procedures, however there is no consistency between countries or even within them. Having conflicting criteria for safety procedures and labelling renders chemical production and sales more costly for companies who must invest in ensuring different kinds of training and education to their workers and translating their labels. In Canada, the transition to GHS will be done in phases. For more information on timeline, please refer to the ICC Compliance Center infographic on the proposed transition provision table:

<http://www.thecompliancecenter.com/infographics/ghs-whmis-2-0.htm>

### **The Switch**

Standardization should simplify education and training once the GHS implementation is applied. The information on SDSs (Safety Data Sheets) and labels for products will share common elements for products made inside and outside of Canada which will help simplify training procedures. The transition does not radically alter the WHMIS guidelines but rather includes some additions:

- Some new classes are added
- Classes now contain subdivisions which are called categories or types that are used to reflect varying degrees of hazard

The new standardization also features classification rules that include:

- Pictograms have been standardized
- Label requirements
- GHS uses Safety Data Sheets (as opposed to the former, Material Safety Data Sheets) that are divided into 16 sections

### **Will my staff or I need special training?**

As the majority of the changes affect labelling and safety data sheet modification, the changes will be implemented by the suppliers. They will continue to classify hazardous products, prepare labels and SDSs in accordance to the new GHS regulation. The employer will likewise ensure that all SDSs and labels are readily accessible to workers.

In order to ensure the optimal safe transition, staff needs to be trained and educated by employers about WHMIS after GHS. Topics covered in the training programs will include:

- New pictograms
- New hazard classes
- New labels and their required elements such as signal words
- The meaning of all signal words and hazard statements that will be on both labels and SDSs in the workplace
- The new SDS format and how to locate the required information in order to ensure a safe handling of products
- Work-site specific training on measures to work safely with hazardous products

Following the GHS implementation, all labels and SDSs of products that originate both within and outside of Canada will share common elements. This international standardization will greatly simplify and facilitate future training for workers.

### **The Roles and Responsibilities**

Manufacturers are responsible for:

- Classifying products
- Creating labels (label elements will be standardized)
- Creating Safety Data Sheets

Employers' responsibilities include:

- Ensuring that all hazardous products are properly labelled
- Making safety data sheets readily available to workers
- Ensuring appropriate control measures to protect the health and safety of workers
- Providing worker education and training
- Revising training programs, developed in consultation with the health and safety committee including:
  - New hazard pictograms
  - New hazard classes
  - New labels and required elements such as signal words
  - The meaning of all the signal words and hazard statements found on labels and SDSs in the workplace
  - The new SDS format and how to locate information needed to work safely with a product
  - Worksite specific training on measures to work safely with hazardous products

### **What changes will I see on the Safety Data Sheets, Labels and marketing materials?**

The changes that will be introduced along with the transition to GHS are new pictograms, hazard and precautionary statements as well as signal words. Understanding the new, standardized means of labeling and communicating safety and hazard procedures will ensure precise handling of chemical products.

### **Labels**

Product labels are the workers first source of information about hazards of a product and how to use them safely. It is therefore a major aspect of the additions to the GHS that is meant to facilitate and ensure safety for the handling of chemical products. For this reason some conditions apply in order to comply with the GHS regulations implemented by WHMIS. The conditions are:

*Following the GHS implementation, all labels and SDSs of products that originate both within and outside of Canada will share common elements. This international standardization will greatly simplify and facilitate future training for workers.*

*The changes that will be introduced along with the transition to GHS are new pictograms, hazard and precautionary statements as well as signal words.*

- Supplier labels must be bilingual
- Labels must be easy to read and durable
- If the label is lost, damaged, or no longer readable, the product must be relabelled.

The label under GHS will contain:

- Product Identifier: The product name exactly as it appears on the container and the SDS
- Hazard Pictograms: in some cases no pictograms may be required
- Signal Words: are used to emphasize hazards and indicate the severity of the hazard
- Hazard Statements: brief standardized statements of all hazards based on the hazard classification of the product
- Precautionary Statements: are used to describe and recommend measures to minimize or prevent adverse effects from exposure to the products, including protective equipment and emergency measures.
- Supplier Identifier: to indicate the manufacturer of the product

It is important, for clarity and uniformity, that the pictograms, signal words, and hazard statements be grouped together on a label. The hatched border that was previously used is no longer a requirement. Inclusion of hazardous ingredients on the label is up to the supplier's discretion but is no longer required. It must, however, be on the SDS

### **Safety Data Sheets (SDS)**

In preparation for the transition to the new system, chemical suppliers are required to continue to meet the additional requirements of Safety Data Sheets that include:

- Following a standard, 16 section format as opposed to the 9 section MSDS format
- Ensuring all SDSs are available in English and French
- Providing the name and address of the Canadian supplier on the SDS
- Disclosing hazardous ingredients according to the requirements of the Hazardous Products Act.

### **Hazard Communication**

In order for a safety system to run efficiently, it must contain standard features to facilitate hazard communication and enhance worker safety. For this reason, both supplier labels and Safety Data Sheets (SDSs) must now include signal words, hazard statements, pictograms, and precautionary statements that will be prescribed for each hazard class. Most label requirements for supplier labels will be standardized and SDSs will feature new requirements and must be accurate at the time of sale and import. New GHS "ratings" are inverted and are only found on safety data sheets (SDSs). Some hazard classes may only have 4 categories. The GHS relies on signal words and phrases rather than the simplified approach of the NFPA/HMIS. For more information, please refer to the ICC Compliance Center infographic on Hazard Ratings:

<http://www.thecompliancecenter.com/infographics/ghs-whmis-2-0.htm>

## New Pictograms

The new GHS pictograms are used to depict the recommended measures that should be taken to minimize or prevent adverse effects caused by exposure to hazardous products.



Flame



Flame Over Circle



Exploding Bomb



Corrosion



Gas Cylinder



Skull And Crossbones



Exclamation Mark



Environmental



Health Hazard

## Consistency for Efficiency

By implementing the Global Harmonized System of classification under WHMIS, Canada is included in an international effort to provide standardized procedures and unity in the workplace. The transition requires minimal changes that will, ultimately, result in a simpler system of classification that will increase worker safety on a global scale.

**About Avmor Ltd.:** Headquartered in Laval, Quebec, Avmor is Canada's leading manufacturer of professional cleaning solutions aimed at the Facility Maintenance and Foodservice markets. Avmor offers cGMP (Current Good Manufacturing Practices), which is a prerequisite to be able to manufacture hand soaps that include disinfection claims and a DIN (Drug Identification number) provided by Health Canada. Avmor offers a full range of hand care products. Avmor's complete line of cleaning products include Cleaners/Degreasers, Floor Care, Washroom Care, Food Service Care, Hand Care, BioMaxx, Disinfectants and others. Some of Avmor's signature brands are **Av-mixx Dilution Control System, Biomor Biological Cleaning Solutions, Quick Stuff Food Service Cleaning System, Synergy Floor Care, EcoPure & Nanomor**, its new environmentally responsible sanitation program which features over 50 certified UL Ecologo products. For over 65 years, Avmor has remained at the industry forefront, defining product performance standards and striving for the safest and most cost-effective cleaning systems for professional use. Avmor Ltd. is a privately held company.