



GHS AND SUPPLY CHAIN IMPACT

December 2015 STLE Meeting

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AGENDA

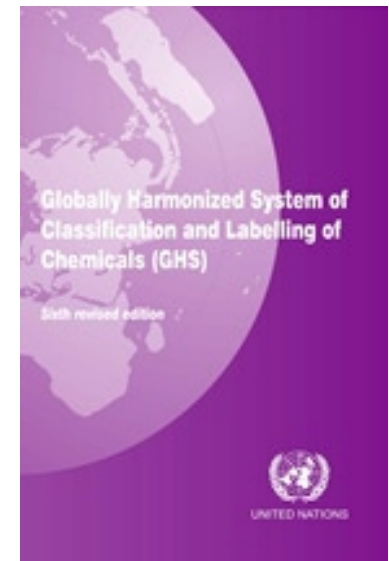


- **GHS Overview**
 - Background
 - Intent
 - Application
 - A Global View on Harmony
 - North American Perspective
- **Supply Chain**
 - Impact
 - Challenges
 - Key Learnings

GHS - GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELING OF CHEMICALS



The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) – internationally agreed-upon system, created by the [United Nations](#) and designed to replace the various classification and labeling standards used in different countries by using consistent criteria on a global level.



Updated every 2 years (Revision 6th – 2015)



Intent

Provide Standardization for Hazardous Chemicals

- Hazardous Classification (Substances & Mixtures)
- Hazardous Communication
 - Labels
 - Safety Data Sheets

Application

Building Block Approach for competent authorities

- Authorities decide how to apply elements of GHS
- Risk Assessment is NOT harmonized [Hazards X Exposure = Risk]

GHS format is used throughout industry for non-hazardous material

GHS INTENT - HAZARD CLASSIFICATION



Hazard Classification

Substances & Mixtures

GHS INTENT - HAZARD COMMUNICATION



SAMPLE LABEL

Product Identifier

CODE _____
 Product Name _____

Supplier Identification

Company Name _____
 Street Address _____
 City _____ State _____
 Postal Code _____ Country _____
 Emergency Phone Number _____

Hazard Pictograms

Signal Word
Danger

Hazard Statements

Highly flammable liquid and vapor.
 May cause liver and kidney damage.

Precautionary Statements

Keep container tightly closed. Store in a cool, well-ventilated place that is locked.
 Keep away from heat/sparks/open flame. No smoking.
 Only use non-sparking tools.
 Use explosion-proof electrical equipment.
 Take precautionary measures against static discharge.
 Ground and bond container and receiving equipment.
 Do not breathe vapors.
 Wear protective gloves.
 Do not eat, drink or smoke when using this product.
 Wash hands thoroughly after handling.
 Dispose of in accordance with local, regional, national, international regulations as specified.

Supplemental Information

Directions for Use

Fill weight: _____ Lot Number: _____
 Gross weight: _____ Fill Date: _____
 Expiration Date: _____

In Case of Fire: use dry chemical (BC) or Carbon Dioxide (CO₂) fire extinguisher to extinguish.

First Aid
 If exposed call Poison Center.
 If on skin (or hair): Take off immediately any contaminated clothing. Rinse skin with water.

Safety Data Sheets

1. Identification
2. Hazard(s) identification
3. Composition
4. First-aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure controls/personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal information
14. Transport information
15. Regulatory information
16. Other information

GHS APPLICATION & ALIGNMENT



September 2015 – 6th Revision publicly available

Source: http://www.unecp.org/trans/danger/publi/ghs/implementation_e.html#c25871

GHS ADOPTION DIFFERENCES



	United States (Rev 3)	Canada (Rev 5)	EU (Rev 4)
Supplier Identifier	The responsible party need not have a U.S. address; however, the telephone number must be a U.S. number.	A Canadian supplier identifier must appear on the label and SDS. -- Not required for Distributors and Importers	the name, address and telephone number of the supplier; -- (Can be EU manufacturer, importer, downstream user or distributor)
Labels on kit outer containers	Only the inner containers are required to be labelled. The outer container of a kit does not need to be labeled.	Outer container of a kit (containing at least two different hazardous products) must be labeled. (There are exemptions)	If subject to both the transport and the CLP rules. The CLP labeling/pictogram does not need to appear.
Consumer Use	Does not apply	Does not apply	Applies
16 Section SDS	#12-15 Outside of OSHA Jurisdiction	#12-15 Optional	ALL 16 Mandatory

GHS NORTH AMERICA



	United States	Canada	Mexico
Authority	OSHA (Occupational Safety & Health Administration)	Health Canada	STPS (Secretariat of Labor and Social Welfare)
GHS	HCS 2012 (Rev 3)	WHMIS 2015 (Rev 5)	NOM-018-STPS-2015 (Rev 5)
Effective (3 year transition)	Mar 2012	Feb 2015	Oct 2015
Replaces	HCS 1998	WHMIS 1988	NOM 018-STPS-2000
Languages	English	English/French	Spanish

GHS (HCS 2012) – UNITED STATES



Dec 1, 2013

Employers: Train employees on new Label and SDS Format

Jun. 1, 2015

Manufactures, importers, Distributors, employers: Compliance with all modified provisions of this final rule, except: The Distributor shall not ship containers labeled by the chemical manufacturer or importer unless it is a GHS label

Dec. 1, 2015

Distributors: Begin Shipping containers labeled by the chemical manufacturer or importer with GHS labels.

Jun. 1, 2016

Employers: Update alternative workplace labeling and hazard communication program as necessary, and provide additional employee training for newly identified physical or health hazards.

- Hazardous Products Regulations (HPR) - WHMIS 2015
- Effective Feb. 11, 2015
- Three-stage transition period
 - June 1, 2017
- Bilingual GHS label/SDS

Product K1 / Produit K1



Danger Fatal if swallowed. Causes skin irritation. Precautions: Wear protective gloves. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Store locked up. Dispose of contents/containers in accordance with local regulations. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. IF SWALLOWED: Immediately call a POISON CENTRE or doctor. Rinse mouth.	Danger Mortel en cas d'ingestion. Provoque une irritation cutanée. Conseils : Porter des gants de protection. Se laver les mains soigneusement après manipulation. Ne pas manger, boire ou fumer en manipulant ce produit. Garder sous clef. Éliminer le contenu/récipient conformément aux règlements locaux en vigueur. EN CAS DE CONTACT AVEC LA PEAU : Laver abondamment à l'eau. En cas d'irritation cutanée : Demander un avis médical/consulter un médecin. Enlever les vêtements contaminés et les laver avant réutilisation. EN CAS D'INGESTION : Appeler immédiatement un CENTRE ANTIPOISON ou un médecin. Rincer la bouche.
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GHS – CANADA



Suppliers				
Phases	Timing	Manufacturers & Importers	Distributors	Employers
Phase 1	Current to May 31, 2017	WHMIS 1988 or 2015	WHMIS 1988 or 2015	WHMIS 1988 or 2015

PRODUCT IDENTIFIER
IDENTIFICATEUR du PRODUIT

<p>RISK PHRASES</p>	<p>MENTIONS de RISQUES</p>
	
<p>PRECAUTIONARY MEASURES</p>	<p>PRÉCAUTIONS à PRENDRE</p>
	
<p>FIRST AID MEASURES</p>	<p>PREMIERS SOINS</p>

SEE MATERIAL SAFETY DATA SHEET
VOIR FICHE SIGNALÉTIQUE

SUPPLIER IDENTIFIER
IDENTIFICATEUR du FOURNISSEUR

Product K1 / Produit K1

	
<p>Danger Fatal if swallowed. Causes skin irritation.</p> <p>Precautions: Wear protective gloves. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.</p> <p><small>Store locked up. Dispose of contents/containers in accordance with local regulations.</small></p> <p><small>IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. IF SWALLOWED: Immediately call a POISON CENTRE or doctor. Rinse mouth.</small></p>	<p>Danger Mortel en cas d'ingestion. Provoque une irritation cutanée.</p> <p>Conseils : Porter des gants de protection. Se laver les mains soigneusement après manipulation. Ne pas manger, boire ou fumer en manipulant ce produit.</p> <p><small>Garder sous clef. Éliminer le contenu/récipient conformément aux règlements locaux en vigueur.</small></p> <p><small>EN CAS DE CONTACT AVEC LA PEAU : Laver abondamment à l'eau. En cas d'irritation cutanée : Demander un avis médical/consulter un médecin. Enlever les vêtements contaminés et les laver avant réutilisation. EN CAS D'INGESTION : Appeler immédiatement un CENTRE ANTIPOISON ou un médecin. Rincer la bouche.</small></p> <p style="font-size: small;">Compagnie XYZ, 123 rue Machin St, Mytown, ON, N0N 0N0 (123) 456-7890</p>

GHS – CANADA



Phases	Timing	Suppliers		
		Manufacturers & Importers	Distributors	Employers
Phase 1	Current to May 31, 2017	WHMIS 1988 or 2015	WHMIS 1988 or 2015	WHMIS 1988 or 2015
Phase 2	Jun 1, 2017 to May 31, 2018	WHMIS 2015	WHMIS 1988 or 2015	WHMIS 1988 or 2015

GHS – CANADA



Phases	Timing	Suppliers		
		Manufacturers & Importers	Distributors	Employers
Phase 1	Current to May 31, 2017	WHMIS 1988 or 2015	WHMIS 1988 or 2015	WHMIS 1988 or 2015
Phase 2	Jun 1, 2017 to May 31, 2018	WHMIS 2015	WHMIS 1988 or 2015	WHMIS 1988 or 2015
Phase 3	Jun 1, 2018 to Nov 30, 2018	WHMIS 2015	WHMIS 2015	WHMIS 1988 or 2015
Completion	December 1, 2018	WHMIS 2015	WHMIS 2015	WHMIS 2015



- Mexican Official Standard, NOM 018-STPS-2015
 - Oct 9, 2015: Adopts 5th Revised Edition of the UN Purple Book
- Transitional Period 3 years
 - Post publication in the Mexican Official Gazette (DOF) (Oct. 2018)
 - NOM 018-STPS-2000 (Mandatory Non-GHS Standard)
 - NOM 018-STPS-2014 (Voluntary GHS Standard)



SUPPLY CHAIN

GHS – SUPPLY CHAIN IMPACT



- Transition periods to:
 - allow suppliers, employers, and workers time to adjust and;
 - move old labels and SDS out of the supply chain.

CHALLENGES to achieve compliance



Can present complexity and additional challenges for Small Businesses within the Supply Chain

GHS – SUPPLY CHAIN CHALLENGES



Changes in Global Regulatory Compliance

- GHS Adoption & Building Block Approach
- OTHER REGULATIONS - Chemical Control List (e.g., REACH, K-REACH,)
- Export Requirements (product specific, country requirements)

Documentation / Maintain Paperwork

- Track changes – document, document, document
- Ensure appropriate distribution of SDS
- Label Documentation (Consumer vs GHS)

Communication

- IT investment or adapt systems for compliance (Data Integration & Cost)
- Multilingual Requirements (translation cost)

Inventory

- Label Process: 30 Days Art Work → 30-60 Days Approvals → 60+ Plate Manufacturing
- Print on Demand Labels (less inventory) vs. Pre-Printed (More Inventory and Obsolete potential)

PHILLIPS 66 LESSONS LEARNED



- **Communication / Collaboration**
- **Product Evaluation / Integrate consistency**
- **Comprehensive approach for SDS authoring**
- **Adaptation of existing IT systems for integration**

Document – Document – Document

QUESTIONS



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