GHS Progress in the United States and Canada (and Europe)

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GHS Progress in the United States and Canada

Quick Review

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What is GHS?

- U.N. Initiative: Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

- Harmonized
  - Classification Criteria
  - Safety Data Sheets (SDSs)
  - Label Elements
Building Block Approach

Purple Book – Up to 4\textsuperscript{th} Revision.
- 3 Haz Groups: Health, Physical, Enviro.
- 28 classes (10 H, 16 P, 2 E)
- Categories (under class)

e.g. Ph: Flammable Aerosol, Category 2
Building Block Approach

- 2 Signal Words (Danger, Warning)
- Combined Hazard Statements
- Combined Precautionary Statements.
- Standardized 16 section SDS
- 9 Pictograms (non-transport)
Building Block Approach

• Each jurisdiction has adopted some building blocks but not others (and list is different from jurisdiction to jurisdiction).

• Each jurisdiction has adopted non-GHS rules (EU SDS Format 453/2010, Prop 65, etc.) which must also be followed.

GHS IS NEITHER GLOBAL NOR HARMONIZED

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Presentation Coverage

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Coverage

We will examine the progress of:

Hazcom 2012 (U.S. based GHS rules)
and

Hazardous Products Regulations
(proposed Canadian based GHS rules)
But before that.. Europe

The EUs 4th ATP (Adaptations to Technical Progress) to the EU’s CLP (Europe’s implementation of GHS) was released on June 1st 2013 as Regulation 487/2013/EU.

But before that.. Europe

Included in the changes are as follows:

New Hazard Category for Non-Flammable Aerosols

Labeling exemptions for small-quantity packaging

Additions/Deletions/Amendments to hazard and precautionary statements

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But before that.. Europe

Companies have until December 1\textsuperscript{st} 2014 for pure substances and \textbf{June 1\textsuperscript{st} 2015 for mixtures} to comply with the new rules.

Nexreg will have a free webinar on the new rules: \url{http://www.nexreg.com/webinars}
But before that.. Europe

If you distribute products in Europe, you will want to ensure your products comply with these changes.

Doubly so if those products are non-flammable aerosols!

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Hazcom 2012 covers:

– Safety Data Sheets (formerly MSDSs)
– Industrial Product Labels

Hazcom 2012 does not cover:

– Consumer Product Labels (regulation unchanged)
Where We Are in the Process

U.S.
- In a transition period, where the old Hazcom rules governing MSDSs and industrial labels can be followed or the new Hazcom 2012 can be followed.

Rule at:
http://www.osha.gov/dsg/hazcom/index.html
Hazcom 2012 Key Dates

- **December 1, 2013** Employees must be trained on SDSs and labels.

- **June 1, 2015** Compliance with final rule for SDSs and labels. (Same date as EU for mixtures)
OSHA’s Key Take-Aways

Large portion of questions have to do with things not changing much with Hazcom 2012.

- Trade Secrets and Ingredient Disclosure
- Workplace vs. Consumer Product
- Training and MSDS Accessibility Requirements

We have webinars available on each.

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Training Date

Note: the mandatory training date for employees is only **two** months away!

OSHA provides information on requirements here:

[https://www.osha.gov/Publications/OSHA3642.pdf](https://www.osha.gov/Publications/OSHA3642.pdf)
Still Waiting For…

Guidance on HNOCs. (Hazards Not Otherwise Classified).

We hope to have some by end of year 2013.
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Canadian Proposal

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As anticipated, Canada is proposing to alter WHMIS to rules based on the Globally Harmonized System (GHS), as many other jurisdictions have already done (e.g. US, EU).

Specifically, Controlled Products Regulations (CPR) being replaced by Hazardous Products Regulations (HPR).
Notice first in the Canada Gazette, that *Controlled Products Regulations* to be repealed and replaced:


Obtaining the Proposed Regulation

A copy of the proposed regulation can be obtained by e-mailing Health Canada:

whmis_simdut@hc-sc.gc.ca

Alternatively, Nexreg can send you a copy by e-mailing:

info@nexreg.com
Summary of the Proposed Regulation

Available from Health Canada:


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Note: The final rule WILL be different than this draft, so treat all information as non-official.
Overall Impression of Draft Rules

- Pleasantly surprised at similarity to US Hazcom 2012.

- A handful of significant differences, though, mostly due to some existing Canadian rules being retained.

- As such, not full harmonization. But there is still time for change!
One Glaring Omission

Implementation timeline. There currently is no draft timeline for implementation. (e.g. June 1, 2015 date for compliance with final rule for SDSs and labels under Hazcom 2012)
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Identical Coverage

Both **Hazcom 2012** and **HPR** cover:
- Safety Data Sheets (formerly MSDSs)
- Industrial Product Labels

Both do not cover:
- Consumer Product Labels (regulation unchanged)

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Both Hazcom 2012 AND HPR based on Revision 3 of GHS (2009 edition). Available for download here:

- [http://www.unece.org/trans/danger/publi/ghs/ghs_rev03/03files_e.html](http://www.unece.org/trans/danger/publi/ghs/ghs_rev03/03files_e.html)


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Classification Under HPR & Hazcom 2012

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Building Blocks Not Used

- U.S. and Canada: Omitted Hazard Categories
  - Acute Toxicity Cat. 5 (Oral, Dermal & Inhl.)
  - Skin Corrosion/Irritation Cat. 3
  - Aspiration Haz. Cat. 2

*Note: These were also omitted from EU CLP, however show up in other implementations (Oral Cat 5. in China, New Zealand, Brazil, etc.)*
Building Blocks Not Used

- Entire *Enviro*. Hazard Group omitted from OSHA (U.S.) and WHMIS (Can) adoption.
  - **Jurisdictional Issue**
Both U.S. and Canada adding classes that are in GHS 3rd edition but **not** in existing WHMIS:

- Specific Target Organ Toxicity – Single Exposure (Categories 1, 2 and 3)
- Aspiration Hazard (Category 1)
HPR & Hazcom 2012 Class Additions

- Both U.S. and Canada adding classes not in GHS 3rd edition:
  - Combustible Dust
  - Simple Asphyxiants
  - Pyrophoric Gases
  - ‘Hazards Not Otherwise Classified’
Similarity – Water Reactive

Substances which react vigorously with water to release a toxic gas (part of old WHMIS Class F) now classified in Acute Toxicity in both HPR and Hazcom 2012.
Differences – Combustible Dust

- **Hazcom 2012**: No precise definition or classification criteria for combustible dust.
- **HPR**: Combustible Dusts — Category 1

A mixture or substance that

1. has been shown to catch fire or explode when dispersed in a gas containing oxygen; or
2. is classified in a division of the hazard class “Flammable Solids” and 5% or more of its composition by weight has a particle size 500μm
Differences – Biohazardous

**HPR** will retain existing D3 class for “Biohazardous Infectious Materials”, though classification criteria will be changing. It is the only class that will be retaining the black border.
Differences – Hazards not Otherwise Classified (HNOCs)

Treatment of HNOCs is significantly different in HPR than in Hazcom 2012. HPR breaks HNOCs into physical (PHNOC) and health (HHNOC). Additional guidance given to PHNOC and HHNOCs in Schedule 4 and Schedule 5 of draft HPR.
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SDSs HPR and Hazcom 2012
HPR and Hazcom 2012 SDSs

- **HPR** and **Hazcom 2012** introduces a 16-section SDS.

- Note: the sections/subsections differ somewhat from the old ANSI standard 16-section MSDS (having a 16-section MSDS does not make one **HPR** or **Hazcom 2012** compliant)

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HPR and Hazcom 2012 SDSs

– Other than PHNOC, HHNOC and Biohazardous Infectious Materials hazard classes, **HPR** appears to be “aligned” with **Hazcom 2012**.

– Overall, a very high level (though not 100%) level of harmonization.
HPR and Hazcom 2012 SDSs

– There are a list of headings and subheadings that are required on a HPR or Hazcom 2012 SDS. These are not to be deleted if there is no information/they are not applicable.

– Instead it is required to fill in the required information (which may be simply writing not available).
HPR and Hazcom 2012 SDSs

– Unlike in the old WHMIS, there is no longer a requirement to update an SDS every 3 years. Rather SDSs (and labels) must be updated when new information becomes available.
Unlike in the old WHMIS, HPR and Hazcom 2012 SDSs required to provide the classification of the hazardous product, as well as information about any reaction product produced as a result of having followed instructions for use provided with the product.
HPR and Hazcom 2012 SDSs

- Unlike in the old WHIMIS, HPR and Hazcom 2012 require that supplier/product identifiers on the SDS and label must match.
Major Difference - HNOCs

Products classified in the PHNOC or HHNOC hazard classes need to have that classification disclosed in Section 2 under HPR, but in Hazcom 2012, only a description of the hazard is required. Chemical identity of an ingredient classified HHNOC must be disclosed in Section 3 in HPR but not Hazcom 2012.
Integration with the EU

- The EU’s GHS based CLP regulation has a required format (EU SDS Format 453/2010) which goes above and beyond what is required in HPR and Hazcom 2012.

- It may be possible to create a format which is both EU CLP and HPR and Hazcom 2012 compliant.
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Labels HPR and Hazcom 2012
Label Harmonization

The old WHMIS industrial labels with hatched borders and black symbols are now gone. Having a harmonized label between Canada and US should be possible!
Label Harmonization

Under **HPR** and **Hazcom 2012**, a label must contain a product identifier, supplier identifier, standardized pictograms, signal word, hazard statements, precautionary statements and supplemental label elements.
Label Pictograms under HPR and Hazcom 2012

**NOTE:** Colour red mandatory for all HPR and Hazcom 2012 label pictograms, except Biohazard (HPR).

**NOTE:** Not allowed to have blank red diamonds or fill them in with ‘THIS DIAMOND INTENTIONALLY LEFT BLANK’ or cross them out.
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 STATEMENT
Highly flammable liquid and vapor.
May cause liver and kidney damage.

SUPPLEMENTAL INFORMATION
Directions for use

______________________________

______________________________
Fill weight: __________ Lot Number ______
Gross weight: __________ Fill Date: ______
Expiration Date: __________

PRECAUTIONARY STATEMENTS
Keep container tightly closed. Store in 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 measure 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.

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 (on hair): Take off immediately any
contaminated clothing. Rinse skin with water.
Label Harmonization

– Under both **HPR** and **Hazcom 2012**, pictogram(s), signal word, hazard statement(s) are required to be grouped together.

– Under both **HPR** and **Hazcom 2012**, there is a supplemental label element warning that ingredients in the mixture are of unknown acute toxicity.
Label Harmonization

– Under both HPR and Hazcom 2012, there are rules of precedence to ensure no duplication of information on label. Hazard statements can be combined when appropriate, as can precautionary statements. Inapplicable precautionary statements can be omitted.
Label DISHarmonization

– Under Hazcom 2012, non-applicable hazard statements can be omitted. This is NOT the case in HPR, where they must be left on.
Label DISHarmoinization - HNOCs

– Under **HPR**, a label must be placed on all products classified as **PHNOC** and **HHNOC** – not the case under **Hazcom 2012**. Label elements include pictogram, hazard statement and signal word “Danger”.

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Label DISHArmonization – Cat. 2 Mutagens

- HPR requires a label on all mixtures containing a Cat. 2 mutagenic ingredient at a concentration of 0.1% or more (current WHMIS cutoff). Hazcom 2012 cutoff is 1%.

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Label DISHarm onization – Biohazards

– Since HPR has this class but Hazcom 2012 does not.
HPR (Canada)

Miscellaneous Changes
Concentration Ranges

It appears that WHMIS ranges on MSDSs are history in HPR. Rules will likely be identical Hazcom 2012.
Flavours and Fragrances

The exemption for flavours and fragrances that exists under WHMIS will not be retained in HPR (same as Hazcom 2012).
Labels on Small Volumes

Products packaged in small volume containers with a capacity of less than 100mL are exempted from the requirement to bear precautionary statements on the label in HPR (different than Hazcom 2012).
Labels on Kits

A single outer container that contains two or more different hazardous products can have a reduced label under HPR. This is not the case in Hazcom 2012.
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To Dos

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1. Train ALL employees on the new rules if you have not already. December 1st coming up quickly. Use OSHAs training document as guidance:


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2. Ensure that labels and SDSs comply with the recent rule changes in the European Union.
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3. Sign up for Nexreg’s free webinars and stay up to date:

http://www.nexreg.com/webinars
Any Questions?

Please e-mail: info@nexreg.com