



Global Harmonized System:
The changing landscape of chemical
classification

REACH USA 2010

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3E Company Europe

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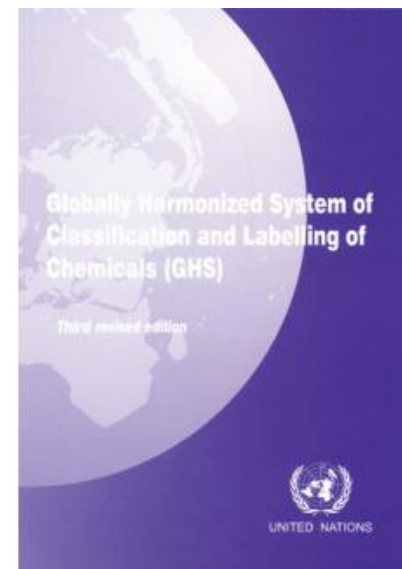


Please remember at all times:

3E Company does not create these regulations- we only try to help companies understand and comply with them!

What is the GHS?

- Globally Harmonized System of Classification and Labelling of Chemicals
- Criteria for hazard classification and hazard communication (Labels and SDSs) are harmonized and standardized.
- Provides the underlying infrastructure for establishment of national, comprehensive chemical safety programs.
- Building block approach: countries and systems take what is required, choosing how to match their current level of protection
- One system for workers, consumers, transport and emergency responders.
 - Different target audiences may have different blocks
- The GHS/UN document is a living document and is updated every 2 years.
- National implementations to stay aligned with revisions



UN GHS structure

Classification:

- Hazard classes & Hazard categories



UN GHS structure

UN Class	UN Categories
EXPLOSIVES	Unstable explosive and Division 1.1 - 1.6
FLAMMABLE GASES	Category 1 - 2
FLAMMABLE AEROSOLS	Category 1 - 2
OXIDIZING GASES	Category 1
GASES UNDER PRESSURE	Compressed gas; Liquefied gas; Refrigerated liquefied gas; Dissolved gas
FLAMMABLE LIQUIDS	Category 1 - 4
FLAMMABLE SOLIDS	Category 1 - 2
SELF-REACTIVE SUBSTANCES	Type A - G
PYROPHORIC LIQUIDS	Category 1
PYROPHORIC SOLIDS	Category 1
SELF-HEATING SUBSTANCES	Category 1 - 2
SUBSTANCES, WHICH IN CONTACT WITH WATER, EMIT FLAMMABLE GASES	Category 1 - 3
OXIDIZING LIQUIDS	Category 1 - 3
OXIDIZING SOLIDS	Category 1 - 3
ORGANIC PEROXIDES	Type A - G
CORROSIVE TO METALS	Category 1
ACUTE TOXICITY	Category 1 - 5
SKIN CORROSION / IRRITATION	Category 1 (incl. A, B and C) - 3
SERIOUS EYE DAMAGE / EYE IRRITATION	Category 1, 2A, 2B
RESPIRATORY SENSITIZATION	Category 1
SKIN SENSITIZATION	Category 1
GERM CELL MUTAGENICITY	Category 1A, 1B, 2
CARCINOGENICITY	Category 1A, 1B, 2
TOXIC TO REPRODUCTION	Category 1A, 1B, 2, EFFECTS ON OR VIA LACTATION
SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE)	Category 1 - 3
SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE)	Category 1 - 2
ASPIRATION HAZARD	Category 1 - 2
AQUATIC TOXICITY (ACUTE)	Category 1 - 3
AQUATIC TOXICITY (CHRONIC)	Category 1 - 4
HAZARDOUS TO THE OZONE LAYER	Category 1

UN GHS structure

Classification:

- Hazard classes & Hazard categories

Label

MSDS: 16 sections

- Section 2 (Hazard Identification) to provide the GHS classification and the GHS label elements



GHS Development

- GHS legislation or standards have been passed in:
 - Asia Pacific:
 - New Zealand (2001)
 - Korea (2008)
 - Singapore (2008)
 - China (2009)
 - Japan (2006)
 - Taiwan (2008)
 - Vietnam (2008)
 - Indonesia (2009)
 - Europe
 - EU (2008)
 - Russia (2009)
 - Africa
 - South Africa (2008)
 - Americas
 - Brazil (2009)
 - Transportation - SOLAS (International Convention for the Safety of Life at Sea) (2009)



GHS Development/cont

- Draft regulations on GHS published:
 - USA
 - Australia
 - Malaysia
- Preparation activities
 - Canada – GHS compliant SDS accepted with reference to WHMIS
 - MERCOSUR countries (Argentina, Brazil, Paraguay, Uruguay)– SDS standards
 - ANDEAN Community (Bolivia, Colombia, Ecuador and Peru, Ecuador) – National Plan, capacity building
 - Serbia, Croatia, Turkey
 - Thailand
 - Philippines
 - UNITAR/ILO Global GHS Capacity Building Programme: Cambodia, Gambia, Laos, Nigeria, Senegal, Zambia

- The criteria for hazard classification is unified, but
- GHS building block approach allows for de-selection of low hazard classes and categories
 - Countries and systems take what is required, choosing how to match their current level of protection
 - GHS also allows for national cut off levels to be selected from 2 options for some classifications
 - Handling of CBI's (section 3: identification of hazardous component) is not regulated at the UN level
 - Other national additions to SDS and labels are permitted and existing
 - For instance section 3 (criteria for substance declaration); section 8, section 14 and section 15

Building blocks

Source: 2nd edition

Table 3.1.1: Acute toxicity hazard categories and acute toxicity estimates (ATE) values defining the respective categories

Exposure route	Category 1	Category 2	Category 3	Category 4
Oral (mg/kg bodyweight) <i>see: Note (a)</i>	5	50	300	2000
Dermal (mg/kg bodyweight) <i>see: Note (a)</i>	50	200	1000	2000
Gases (ppmV) <i>see: Note (a)</i> <i>Note (b)</i>	100	500	2500	5000
Vapours (mg/l) <i>see: Note (a)</i> <i>Note (b)</i> <i>Note (c)</i> <i>Note (d)</i>	0.5	2.0	10	20
Dusts and Mists (mg/l) <i>see: Note (a)</i> <i>Note (b)</i> <i>Note (e)</i>	0.05	0.5	1.0	5

Building blocks/example

Acute human toxicity, oral category 5

- Not implemented by Japan (JIS 7252-2009), Korea, EU, Singapore, OSHA (draft)
 - but by others including Taiwan, China, New Zealand, Brazil, Indonesia
- Hazard communication:
 - “Warning”
 - “May be harmful if swallowed”

National cut offs

	UN Purple book 3rd edition optional cut offs
Skin Sensitizer CAT 1:	$\geq 0.1\%$; $\geq 1.0\%$ Declaration in SDS > 0.1%
Respiratory Sensitizer:	Solid/Liquid - $\geq 0.1\%$; $\geq 1.0\%$ Gas - $\geq 0.1\%$; $\geq 0.2\%$ Declaration in SDS > 0.1%
Carcinogen Category 2:	$\geq 0.1\%$; $\geq 1.0\%$. Declaration in SDS > 0.1%
Reproductive Toxicant Category 1:	$\geq 0.1\%$; $\geq 0.3\%$
Reproductive Toxicant Category 2:	$\geq 0.1\%$; $\geq 3.0\%$ Declaration in SDS >0.1%
Effects via lactation	$\geq 0.1\%$; $\geq 0.3\%$
STOT (single exposure) Category 1 and 2:	$\geq 1.0\%$; $\geq 10\%$ Declaration in SDS >1% Between 1 and 10% of CAT 1: optional to require mixture to be classified as Cat 2
STOT (repeated exposure) Category 1 and 2:	$\geq 1.0\%$; $\geq 10\%$ Declaration in SDS >0.1% Between 1 and 10% of CAT 1: optional to require mixture to be classified as Cat 2

EU CLP and REACH

Interfaces and interactions:

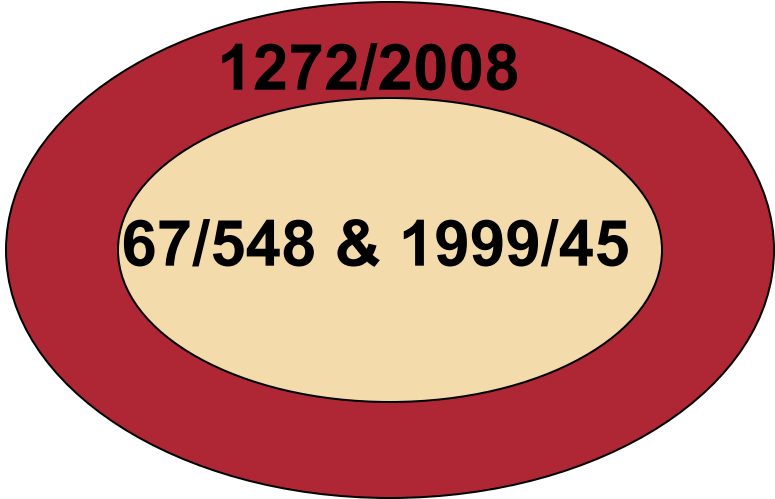
- Chemical safety assessments (CSA) and exposure scenarios (ES)
- Downstream legislation
- Safety data sheets (SDS)

EU CLP & REACH

- **“Dangerous”** (67/548 (DSD) & 1999/45 DPD))
- **“Hazardous”** (1272/2008 (CLP))



67/548 & 1999/45



1272/2008

67/548 & 1999/45

- **“Dangerous”** defines the scope of some obligations under REACH and some downstream regulations

- The following hazards (under 1272/2008) do not require CSA and ES:
 - Gases under pressure
 - Self reactive substances and mixtures type C, D, E, F and G
 - Self heating substances and mixtures
 - Oxidising liquids category 3
 - Oxidising solids category 3
 - Organic peroxides type G
 - Corrosive to metals
 - Adverse effects on or via lactation
 - Specific target organ toxicity – single exposure, narcotic effects (part of category 3, H336)

EU downstream legislation

- Over 20 pieces of downstream legislation refer to classification either directly or indirectly
- Changes issued:
 - Regulation 1336/2008 amending the detergents regulation (648/2004)
 - Directive 2008/112 amending the cosmetics (76/768), toys (88/378), VOC (1999/13), ELV (2000/53), WEEE (2002/96) and VOC paint and varnishes (2004/42) directives
- Others under review:
 - Seveso II, 5 occupational safety and health directives, hazardous waste, ecolabeling, safety of toys, new cosmetic products
- Changes of reference to CLP, conversion of danger to hazard classes, alignment of terminology

- Hazard communication – SDS
 - since 1991 with amendments in 1992 and 2001 under DSD/DPD,
 - since 2006 under REACH
- Regulation (EC) No 1272/2008 (CLP) on classification, labelling and packaging of substances and mixtures
 - Amends Article 31 and Annex II of REACH (SDS)
 - In force since 20 January 2009
- New Annex II to REACH - adopted but not published

SDSs and labels – when to change

- The SDS follows the label

Deadline - Additional 2 years if the product is already on the market	The Safety Data Sheet ...
until 1 December 2010	... shall contain the classification of a substance according to DSD. However, if a substance is already classified, labelled and packaged according to CLP, the Safety Data Sheet for the substance shall also contain the CLP classification of the substance.
until 1 June 2015	... shall contain the classification of a substance according to DSD. After 1 December 2010 the CLP classification shall also be provided.
until 1 June 2015	... shall contain the classification of a mixture according to DPD. However, if a mixture is already classified, labelled and packaged according to CLP, it shall also contain the CLP classification of the mixture.
from 1 June 2015	... shall contain substance and mixture classifications according to CLP.

EU CLP & REACH - SDSs



- SDSs are required for all hazardous products and for products containing hazardous substances above certain thresholds
- New, revised REACH Annex II:
 - Text of the 16 MSDS headers have been changed
 - Inclusion of the sub-headers (Part B of Annex II) have been made mandatory
 - 2 versions of Part A of Annex II reflecting the transition periods (Dec 1, 2010 and June 1, 2015) plus the present Annex
 - Alignment to GHS/CLP - new elements, e.g. mobility in soil
 - Alignment to REACH and link to registration dossiers, e.g. registration number, Sec 8: DNELs and PNECs, Sec 11 and 12 data from registration dossiers
 - No blank subsections and reasoning for “no information available”, “negative data” etc.
 - During the transition period the actual label used directs which SDS version to use

EU CLP & REACH – SDSs/cont



New, revised Annex II. Major changes to:

Sect 1:

- Identified uses and registration number for pure substance products

Sect 2:

- Label elements (previously in section 15)
- Result of PBT and vPvB assessment.
- Classification according to 67/548 (substances) or 1999/45 (mixtures) to be included until June 2015 also when the product is classified and labeled under CLP
- If ranges are used in sec 2: classification to be based on upper limit

Sect 3:

- Mixtures: Classification of ingredients according to 67/548 plus according to CLP if CLP label is used or if CLP classification is available
- New threshold limits for declaration for certain endpoints
- Indication of OEL, PBT, vPvB substance if substance is not classified

SDS Major changes/cont

Sec 8:

- Derived No Effect Levels (DNEL) and Predicted No Effect Concentrations (PNEC)

Sect 11:

- Structure based on GHS hazard classes
- Additional comprehensive details based on information in registration dossiers
- Reasons for non-classification must be stated

Sect 12:

- Additional comprehensive details based on information in registration dossiers
- Results of PBT and vPvB

Sect 15:

- No label elements (moved to Sect 2)
 - Reference to the Community legislation (restrictions, authorization)
 - Reference to national legislation specified
 - Reference to Chemical Safety Assessment

Sect 16:

- CLP classification may be provided here until it is used for labeling.
- Key or legend to abbreviations.

- Extended SDS (eSDS):
 - Information from exposure scenarios (ES) to be included in or coordinated with information in relevant sections of the SDS (sect 1, 7, 8, ..)
- Annex with ES:
 - ES to be attached by registrant
 - Downstream users:
 - Attach substance ESs
 - Develop ES for the mixture
 - Critical component approach
 - DPD+ method; lead/priority substances; critical component
 - Include ES information (RMM and OC) in main body of SDS

- Harmonizations to GHS is taking place at high speed and involves changes in related regulations
- Requires companies to stay up to date
 - Knowledge
 - Processes
 - Systems
- With US OSHA implementing GHS the changes not only impacts exporting companies

Thank you for your attention!
Any questions?

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- Back up slides

New Zealand



- GHS classification criteria implemented by the Hazardous Substances & New Organisms Act in July 2001
- HSNO Approved Code of Practice for Preparation of Safety Data Sheets (HSNO CoP 8-1 09-06)
- HSNO Approved Code of Practice for Labeling of Hazardous Substances (HSNO CoP 10-1 08-07)
- NZ classifications have some additions to and deviations from UN GHS www.unece.org/trans/doc/2006/ac10c4/UN-SCEGHS-11-inf14e.pdf
- Correlation table between UN GHS to New Zealand GHS <http://www.ermanz.govt.nz/hs/compliance/chemicals.html>
- GHS labels and MSDSs
 - From July 2008 for chemicals that fall under a Group Standard
 - But labels in accordance with overseas jurisdictions (Europe, Australia, USA or Canada) are accepted until end of 2010



- GHS label (article 57-1) and GHS MSDS (article 57-2) required by the Industrial Safety and Health law as of December 1, 2006
- Japan Industrial Standard (JIS) Z 7250:2005 – Material Safety Data Sheets for Chemical Products
- Japan Industrial Standard (JIS) Z 7251:2006 – Labeling of Chemicals based on GHS
- Japan Industrial Standard (JIS) Z 7252:2009 – Classification
- Japan Chemical Industrial Association (JCIA) - GHS Guideline for MSDS and labeling (2nd edition – Oct. 2008) based on JIS Z 7250 and Z 7251
- METI published two GHS classification guidance on May 2009 – for government and enterprise
- Advisory list with GHS classifications published by NITE (National Institute of Technology and Evaluation) – so far, 1,581 substances
<http://www.safe.nite.go.jp/ghs/list.html>
- Recent advisory GHS classification list provided by JAISH (Japan Advanced Information Center of Safety and Health) – 328 substances of hazardous and harmful substances designated by EU or other countries.
http://www.jaish.gr.jp/anzen/gmsds/bunrui/bunrui_index.html



Ministry of Labor:

- Industrial Safety and Health Law
- Pure substances: July 1, 2010; Mixtures: July 1, 2013
- KOSHA has published advisory list with GHS classifications – 6,500 substances (website: <http://www.kosha.or.kr/index.jsp> - members only)

Ministry of Environment:

- Ministerial Decree of Toxic Chemical Control Law
- Classification and labeling of new chemicals under the revised TCCL is mandatory since July 1, 2008.
- Existing chemicals with transitional period: Single toxic chemical (June 30, 2011); Mixtures (June 30, 2013)
- GHS classification – started from NIER No. 2, Feb. 2009 under Regulation on the Standard of Classification and Labeling of Toxic Substances → the latest NIER No. 2010-4, January 25, 2010

MOL and MOE have different hazard categories/ timelines for implementation



- Regulation of Labeling and Hazard Communication of Dangerous and Harmful Substances (effective on December 31, 2008) (“CLA Regulation”)
 - CLA Regulation - without Environmental Hazard Categories
 - Taiwan CLA GHS website: <http://ghs.cla.gov.tw/en/>
- Management Measures on Toxic Substances Labeling and Material Safety Data Sheet (EPA No. 0960095329) (Effective Date: December 31, 2008) (“EPA Regulation”)
 - EPA Regulation with Environmental Hazard Categories
- Taiwan National Standard, CNS 15030: Classification and Labeling of Chemicals (based on GHS (Rev.1)(2005)).
 - Precautionary statements have not been officially adopted.
- MSDSs and labels are required for (Phase I implementation)
 - 1,062 substances specified by the CLA (Council of Labor Affairs) and for products containing these
 - 413 dangerous, harmful (original) + 649 dangerous (amendment) =1,062
 - 259 toxic chemicals listed by EPA
 - Grace period until December 31, 2009



EU CLP - Regulation (EC) No 1272/2008

- Applicable in 27 EU member countries, in force January 20, 2009
 - Amended first time with Regulation (EC) No 790/2009
- Repealing Directives 67/548/EEC (Dangerous Substances Directive, DSD) and 1999/45/EC (Dangerous Preparations Directive, DPD) on June 1, 2015
- Applies to substances Dec 1, 2010 and to mixtures June 1, 2015 for
 - Classification, Labels, SDS classification information
- Norway: in parallel with existing classification regulation
 - National classification of 10 substances valid until 1 June 2015
- Switzerland:
 - Swiss chemicals ordinance amended to provide an option of GHS classification and labeling. (in force on February 1, 2009)
 - For GHS-option, Regulation (EC) No 1272/2008 is mandatory
 - 1st step – chemical products sold for professional use
- Iceland: Follows Regulation (EC) No 1272/2008, implemented as of Jan. 2009



- Title V, chapter 2 C&L inventory
 - Applies to substances subject to registration under REACH and to hazardous substances placed on the market (as pure substances or in a mixture)
- Notification to ECHA
 - Within one month after the substance is placed on the market starting December 1, 2010 (Jan 3, 2011)
 - By importer (I) or manufacturer (M) or group of I or M.
 - If not already submitted as part of registration dossier, or if already notified by that notifier
- Substance information (C&L, etc) will be published in a database by ECHA
 - Certain information will be public available (coordinated with Art 119(1) of REACH)



- MSDSs and labels are required by the Workplace Safety and Health Regulation (2006) section 42 and 43.
- Singapore Standard SS 586:2008:
 - Revision of SS 286:1984 (Caution Labeling for Hazardous Substances) and CP 98:2003 (Preparation of Material Safety Data Sheets (MSDS))
 - Not all hazards categories are not adopted
 - Transitional period:
 - Manufacturers and suppliers
 - Single substances: by the end of 2010
 - Mixtures: by the end of 2012

Vietnam



GHS is implemented in the Vietnam Chemical Law by Decree No. 108/2008/ND-CP of October 7, 2008

Follows and refers to the UN GHS classifications

Implements all UN hazard categories



Classification:

- GB20576-2006 to GB20602-2006 - translation of UN Purple book
 - Published October 2006, in force Jan 1, 2008.
 - Currently under revision to include the 2007 changes to the UN Purple Book
- MSDSs and Labels are required by Decree No 423 of Ministry of Labor of Dec 20, 1996, and effective 1997, Jan.1.
- Manufactures, users, transporters etc. must provide SDS and Label.
 - Applies to mixtures or substances listed in GB 13690-2009 (General Rule for Classification and Hazard Communication of Chemicals).
 - GB 13690–2009 published March 2010 & effective: May 1, 2010

SDSs: GB /T 16483-2008 (Safety data sheet for chemical products content and order of sections)

- Issued: June 6, 2008; Implementation: Feb. 1, 2009

Labels:

- 1) GB/T 22234-2008 (Labeling of chemicals based on GHS)
 - Effective from Feb. 1, 2009.
 - Equivalent to the Japanese JIS Z 7251:2006
- 2) GB 15258-2009 (General Rules for Preparation of Precautionary Label for Chemicals) - Published Dec 2009 & effective: May 1, 2010 (1 year of transitional period from the effective date)



Technical regulation on chemical safety (which is expected to be approved by the end of 2010).

Russian GOST standard 30333-2007 (Safety of Chemical Products. General requirements) (Safety Passport - SDS) is based on GHS 2005 (in force since January 1, 2009);

Russian GOST 31340-2007 (Precautionary labeling of Chemical Products. General requirements) (in force since January 1, 2009);

Standards are adopted by

- Russia,
- Kazakhstan,
- Azerbaijan,
- Byelorussia,
- Kirghizia,
- Moldova,
- Tadjikistan,
- Uzbekistan



- Regulation on Classification and Labelling of Chemical Substances is under revision
- New standard can be used during the transition period:
 - Pure substances till 2012
 - Mixtures till 2016
- SANS 10234:2008 (GHS of Classification and Labelling of Chemicals)
- Supplement to SANS 10234:2008 (List of Classification and Labeling of Chemicals in accordance with the GHS)
- Issued December 2009



- ABNT NBR 14725-1: (Chemicals - Information about safety, health and environment - Part 1: Terminology)
- ABNT NBR 14725-2: ((Chemicals - Information about safety, health and environment - Part 2: Hazard Classification)
 - Other classification systems can be used up to Feb. 26, 2011. As of Feb. 27, 2011, chemicals should be classified only in accordance with this part
- ABNT NBR 14725-3: (Chemicals - Information about safety, health and environment - Part 3: Labelling)
 - Supplements existing specific legislation on labeling of chemicals. Until Feb. 26, 2011, the use of this standard is optional. Feb. 27, 2011, the chemicals must be labeled in accordance with this part
- ABNT NBR 14725-4: (Safety data sheet for chemicals (SDS))
 - SDSs can be prepared in accordance with the previous edition of this Standard (ABNT NBR 14725:2005) until Feb. 26, 2011. As of Feb. 27, 2011 the MSDS should be prepared only in accordance with this issue (NBR 14725-4:2009).
- Effective on September 26, 2009



- Ministry of Industry Regulation No. 87/M-IND/PER/9/2009 regarding Globally Harmonized System of Classification and Labeling of Chemicals.
 - issued on Sept. 24, 2009.
 - effective on March 24, 2010
- Regulation of the Minister of Trade of the Republic of Indonesia Number 44/MDAG/PER/9/2009 regarding the Distribution and Supervision of Dangerous Substances
 - Implements GHS
 - Requires MSDSs
 - Annex 1: substances regulated for import
 - Annex 2: substances regulated for distribution
 - Annex 1 & 2 replaces 254/MPP/Kep/7& 04/M-DAG/PER/2/2006 /2000
 - Annex IV: GHS criteria
 - Effective (60 days from its issuance date): Nov. 15, 2009

Amendment to the International Convention for the Safety of Life at Sea (SOLAS):

- ships carrying MARPOL Annex I cargoes (oil) and marine fuel oils are to be provided with a material safety data sheet prior to loading such cargoes, effective January 1, 2011
- IMO recommendation BLG 13/10 for MSDSs for MARPOL Annex I cargoes, effective July 1, 2009
 - MSDS must be in accordance with the UN GHS
 - reference to MARPOL Annex I throughout the MSDS
 - Sec 2, 3 & 11: specific reference to benzene, hydrogen sulphide and total sulphur



Proposal

- to modify the current Hazard Communication Standard “HCS” to conform with the United Nations Globally Harmonized System of Classification and Labeling of Chemicals “GHS released by OSHA September 2009
- Not all hazard classes and categories are proposed adopted

Timeline:

- Public comments were to be submitted by **December 29, 2009**
- Minimum of **18 months** before the final rule is promulgated
- **Can be applied from date of** promulgation and latest 3 years after (2 years for training)
- EU GHS labels are accepted now provided conformance with the current OSHA standard

(http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=27218)



Proposed revisions to the workplace chemicals regulatory framework

- Draft National Code of Practice for the Labelling of Workplace Hazardous Chemicals (July 31, 2009) [Comments due date: Sept. 25, 2009]
- Draft National Code of Practice for the Preparation of Safety Data Sheets (July 31, 2009) [Comments due date: Sept. 25, 2009]
- Australian Criteria for the Classification Hazardous Chemicals (previously known as the 'Approved Criteria') (To be advised)

<http://www.safeworkaustralia.gov.au/swa/HealthSafety/HazardousSubstances/Proposed+Revisions/>



- Department of Health and Safety (DOHS)
 - Draft regulation for the implementation of GHS to workplace chemicals
 - Occupational Safety and Health (Classification, Labeling and Safety Data Sheet for Hazardous Chemicals) Regulation 20xx [“CLASS”] (not finalized & published yet)
 - To replace 1997 Regulations on Classification, Packaging, Labeling and Safety Data Sheets for Chemicals
 - Implementation is expected for 2010

Philippines



- JOINT ADMINISTRATIVE ORDER NO. 01 Series of 2009, issued May 25 2009
- The objective is the adoption and implementation of classification criteria, labeling and Safety Data Sheet (SDS) requirements of the GHS
- The order sets out the duties and responsibilities of the GHS implementing and coordinating government agencies in the adoption:
 - Department of Agriculture (DA);
 - Department of Environment and Natural Resources (DENR);
 - Department of Finance (DOF);
 - Department of Health (DOH);
 - Department of Interior and Local Government (DILG);
 - Department of Labor and Employment (DOLE);
 - Department of Transportation and Communications (DOTC); and
- Department of Trade and Industry (DTI).
- Specifies the SDS requirements

Art 14 of REACH: CSA and ES

