

# **GHS Network of Experts**

**Overview of GHS implementations 2019** 

January 13, 2020

This document reports the implementations of the UN *Globally Harmonized System of Classification and Labelling of Chemicals* (GHS) in specific countries. In case members would like to have further information, Cefic should be contacted for such information.



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## **Foreword message**

The UN *Globally Harmonized System of Classification and Labelling of Chemicals* (GHS) is a cornerstone for sound chemical management systems and it is on the international sustainable development agenda since 1992. While several countries have implemented GHS, many countries with fast growing chemicals industry have not done so.<sup>1</sup> In the context of SAICM post-2020 discussions, UNITAR, ILO and the OECD have proposed to launch a coalition of stakeholders to scale up GHS implementation.

The purpose of this document is to provide a global view of the GHS implementation status. This work is the result of a collective effort undertaken by a network of Country Focal Points coordinated by the Cefic GHS Network of Experts. A variety of documents and channels have been used to put this document together. Despite our efforts, we cannot guarantee 100% accuracy. Our experts are available to provide additional information to member companies as needed.

The structure of the 2020 report follow the report issued last year, with some adjustments to improve the readability of the text. The countries are grouped in to 7 groups and within each group, the order of countries is given alphabetically. The groups account for the different stages of the implementation process: from countries where GHS is implemented and enforced to countries at the very early stage of the implementation process.

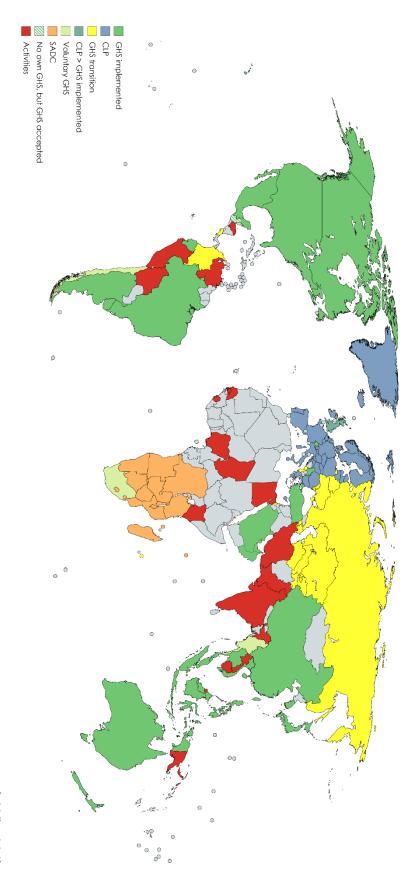
For each country, a brief description is provided, with the aim of describing the GHS implementation status and key information such as the scope, deadlines (for substances and mixtures), the implementation of a substance classification list, signification deviations from UN GHS hazard communication (SDS, label) requirements and, last but not least, the GHS version adopted.

This report accounts for 79 countries or regions, respectively.

<sup>&</sup>lt;sup>1</sup> As of 2018, more than 120 countries had **not** implemented GHS.



The table below provides a visual of the of the GHS implementation:



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## **GHS** implementation in force

## 1. Argentina

Argentina implemented UN GHS Revision 5 in 2017. It adopted UN GHS in 2013 (Revision 4) by incorporation into the IRAM (Institute for the Standardization and Normalization) standards No. 41401:2014 (Labelling) and No. 41400:2013 (SDS) on a voluntary basis. On 10 April 2015, Resolution 801/2015 was published, officially approving the implementation of GHS Revision 5 at the workplace.

To allow stakeholders enough time to implement GHS provisions, article 6 established its entry into force 180 days after its publication in the Official Journal. Resolution SRT 3359/2015 (29 September 2015) delayed implementation of GHS again until 15 April 2016 (substances) or 1 January 2017 (mixtures), respectively. Further extension was granted (in June 2016) for substances (until January 2017) and mixtures (until June 2017) not appearing in specified lists.

Scope:	Chemical products for industrial and
	professional use
Deadline for substances:	In force (15 April 2016 / January 2017)
Deadline for mixtures:	In force (1 January 2017 / June 2017)
Substance classification list:	-
HazCom (SDS, label):	Strict alignment with UN GHS
	SDS with 16 sections
UN GHS reference:	UN GHS Revision 5

Country-specific information: <u>http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25721</u> <u>http://www.iram.org.ar/index.php</u> <u>http://www.infoleg.gob.ar/infolegInternet/anexos/245000-249999/245850/norma.htm</u> <u>https://www.srt.gob.ar/index.php/sga-2/</u>

## 2. Australia

Australia implemented UN GHS Revision 3 in 2016. It is implemented through model Work Health and Safety (WHS) Regulations from 1 January 2012, proposed by national body SWA. The WHS has subsequently been revised several times, last at 28 November 2016). The corresponding model Code of Practice is *Preparation of Material Safety Data Sheets* (latest version published 25 May 2018). For the WHS (and amendments) and the model code of practices to take effect they must be approved in to each jurisdiction (state, see below). To find out if a model code of practice is approved, you should check with the regulator.

GHS had to be implemented by each State and Territory workplace laws. It is mandatory in NSW, QLD, SA, TAS and NT since 1 January 2017, following a five-year transition period. In Victoria, implementation is by the *Occupational Health and Safety Regulations* (S.R. No. 54/2007), and in Western Australia by *Occupational Safety and Health Regulations* (1996). Both Victoria and Western Australia under their respective legislation accept classification using GHS revision 3. GHS cut-off values for mixtures are amended in WHS, Schedule 6.



Like New Zealand, Australia consulted in 2019 on adopting GHS Revision 7, to remain aligned with key chemicals trading partners (including the EU). That means GHS 7 would replace GHS 3 under the model WHS laws, plus transitional arrangements (two years for updating classifications and label). However, because of the complicated regulatory structure mentioned before, there may be delays.

Main changes would be a new hazard class for desensitized explosives, and a new hazard category (Category 3) to classify non-flammable aerosols, sub-categorisation for flammable gases Category 1, additional hazard classes for pyrophoric and chemically unstable gases, revisions to the definitions of some health hazard classes, clarifications to the criteria for Serious Eye Damage/Eye irritation Category 2, updated precautionary statements, including combined precautionary statements, and finally the removal of some "Australian-only" requirements.

Scope:	Applies to substances used in the workplace. (Consumer products are labelled according to the Poisons Standard.)
Deadline for substances:	In force (December 2016).
Deadline for mixtures:	In force (December 2016).
Substance classification list:	GHS Hazardous Chemical Information List (HSIS) is available. However, this is advisory only, and it remains the
	responsibility of the manufacturer or importer to classify their product.
HazCom (SDS, label):	SDS must be in English language (Victoria permits others in addition); an Australian address, telephone number, and
	emergency telephone number are required (WHS Regulation 330).
	Environmental endpoints are not in scope of existing OHS laws, although they are permitted for information purposes.
Additional information:	- Class C1 combustible liquids will have a special GHS category for Australia, and these are liquids that have a flash point $> 60^{\circ}$ C and $\le 150^{\circ}$ C
	- The following hazard categories are <i>not</i> implemented:

- acute toxicity category 5
- skin irritation category 3
- eye irritation category 2B
- aspiration hazard category 2
- flammable gas category 2
- acute hazard to the aquatic environment category 1, 2 or 3
- chronic hazard to the aquatic environment category 1, 2, 3 or 4
- hazardous to the ozone layer



Additionally, 12 Hazard Phrases (same as EUH-phrases but beginning with "AU")
Cut-off values for mixtures will be included in the Australian Chemicals Classification Criteria (separate document from regulations)

Consumer goods, human therapeutics, cosmetics, toiletries and some veterinary chemicals are exempted from the GHS labelling requirements under the model WHS Regulations. Agricultural and veterinary chemicals registered by the Australian Pesticides and Veterinary Medicines Authority (APVMA) are partially exempted from GHS labelling requirements (only hazard and precautionary statements are required to be included if they are not already on the approved APVMA label). UN GHS Revision 3 (next: Revision 7)

UN GHS reference:

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25730 https://www.safeworkaustralia.gov.au/doc/model-code-practice-preparation-safety-datasheets-hazardous-chemicals https://www.safeworkaustralia.gov.au/law-and-regulation

https://www.safeworkaustralia.gov.au/whs-authorities-contact-information

#### 3. Brazil

Brazil implemented UN GHS Revision 4 in February 2015. The Brazilian standard ABNT NBR 14725:2009 set detailed rules for chemical classification, labelling and safety data sheets. It consists of the following four parts:

- ABNT NBR 14725-1:2009 Terminology information about safety, health and environment (2010)
- ABNT NBR 14725-2:2009 Hazard Classification System (version of 2009, under revision, see below)
- ABNT NBR 14725-3:2009 Labelling (2012, errata 2013)
- ABNT NBR 14725-4:2009 Safety Data Sheet or FISPQ (2012)

Several amendments and corrections to Standard ABNT NRB 14725:2009 were published.

Brazil is working on implementing UN GHS Revision 5. This amendment will contain an article definition.

However, in June 2019, the Brazil Association of Technical Standards (ABNT) updated its standards for classifying chemicals, bringing it in line with standard Globally Harmonized System (GHS) cut-off values/concentration limits, based on Revision 7, published in 2017.



The changes to ABNT NBR 14725-2, Hazard Classification System, include the following changes:

- Simplification of Table 8 classification of mixture as hazardous to the eyes •
- Updates to:
  - Table 10 cut-off values/concentration limits determining classification of the mixture as a skin or respiratory sensitizer
  - Table 14 cut-off values/concentration limits determining classification of the mixture as a carcinogen
  - Table 16 cut-off values/concentration limits determining classification of the mixture for reproductive toxicity
  - Table 19 cut-off values/concentration limits determining classification of the mixture for specific target organ toxicity single exposure
  - Table 23 cut-off values/concentration limits determining classification of the mixture for specific target organ toxicity repeated exposure
- The updates to the cut-off/concentration limit tables are as follows: •
  - Respiratory or skin sensitization add subcategories 1A/B; change threshold from  $\geq 0.1$ % to  $\geq$  1 % for category 1/1B; add threshold for respiratory sensitization  $\geq$  0.2 % for category 1/1B
  - Carcinogenicity add subcategories 1A/B; change category 2 threshold from  $\ge$  0.1 % to ≥1%
  - Reproductive toxicity and lactation add subcategories 1A/B; change category 1A/B and 0 lactation. threshold from  $\ge$  0.1 % to  $\ge$  0.3 %; change category 2 threshold from  $\ge$  0.1 % to ≥ 3 %
  - Specific target organ toxicity single exposure change category 1 threshold from 1% to 10%, whereby 1% of category 1 causes classification in cat 2; change category 2 threshold from 1% to 10%
  - Specific target organ toxicity repeated exposure change category 1 threshold from 1% to 10%, whereby 1% of category 1 causes classification in cat 2; change category 2 threshold from 1% to 10%

Scope:	Chemical products
Deadline for substances:	In force (26 February 2011)
Deadline for mixtures:	In force (1 June 2015)
Substance classification list:	-
HazCom (SDS, label):	Labels mandatory from 1 Dec 2015; SDSs required from 1 June 2015
Additional information:	-
UN GHS reference:	UN GHS Revision 4
	(next: Revision 5 or 7)

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation e.html#c25750 http://www.desenvolvimento.gov.br/sitio/secex/negInternacionais/claRotSubQuimicas/oquee. php

https://www.abntcatalogo.com.br/norma.aspx?ID=418238



#### 4. Canada

Canada implemented UN GHS Revision 5 in 2018. Setting out from the Hazardous Products Act (HPA), Canada published the new *Hazardous Products Regulations* (HPR) on 11 February 2015, adopting UN GHS Revision 5 and modifying the WHMIS 1988 requirements to incorporate the GHS for workplace chemicals ("WHMIS 2015").

The Hazardous Products Regulations were published in Part II of the Canada Gazette (SOR/DORS/2015-17, last amended on 4 April 2018, published by the Minister of Justice (see below).

The Controlled Products Regulations (CPR) and the Ingredient Disclosure List have been repealed. Although the new HPR has many commonalities with the US Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS 2012), some variances do exist. The new requirements were being implemented in a phased approach. Deadline for both substances and mixtures was 1 June 2017 (postponed to 1 December 2018).

WHMIS is enforced by the provincial or territorial government departments or agencies responsible for health and safety, or by the Labour Program for federally regulated workplaces.

Scope: Deadline for substances: Deadline for mixtures:	Workplace In force (1 December 2018, was 1 June 2018/2017/2015) In force (1 December 2018, was 1 June 2018/2017/2015)
Transition period:	<ul> <li>Feb 2015 – 31 May 2018:</li> <li>Manufacturers, importers and distributors (suppliers) to comply with <i>either</i> old (CPR) or new (HPR) system.</li> <li>Employers: Consult FPT OSH regulator</li> <li>Phase 2: 1 June 2018 – 31 August 2018:</li> <li>Manufacturers and importers (suppliers) to comply with new system (HPR).</li> <li>Distributors (suppliers) to comply with <i>either</i> old (CPR) or new (HPR) system.</li> <li>Employers: Comply with CPR or HPR requirements.</li> <li>Phase 3: 1 September 2018 – 30</li> <li>November 2018:</li> <li>Manufacturers, importers and distributors (suppliers) to comply with HPR requirements. Employers: Comply with CPR or HPR requirements</li> <li>Completion: 1 December 2018:</li> <li>Manufacturers, importers and distributors to comply with new system (HPR). Employers: Comply with HPR requirements</li> </ul>
Substance classification list:	Prescribed (= mandatory) classification list (in HPR Schedule 4, limited to PHNOC



	and self-heating substances and mixtures
	at the moment)
Note:	1 June 2016: WHMIS 2015 SDS required for new CBI submissions
HazCom (SDS, label):	Labelling (based mostly on Rev 5/2013) & SDS (classification based mostly on Rev 3/2009): in both official languages of Canada (French and English): a single bilingual SDS or label or two unilingual parts that constitute one bilingual SDS or label. On SDSs prescribed ranges possible to protect CBI
Additional information:	Canada is currently looking to adopt updates made to the GHS between the Revisions 5 and 7. The existing scope of adoption will be maintained, and the following categories or subcategories are proposed for inclusion: Flammable Gases 1A/1B, Chemically Unstable Gases, and Aerosol Category 3. Canada's Pyrophoric Gases hazard class will be removed from the HPR as these gases will be classified as a category under Flammable Gases 1A. Furthermore, in August 2019 OSHA and Health Canada issued three new joint guidance documents to support implementation of GHS: see for more
UN GHS reference:	details the description for the USA. UN GHS Revision 5

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25755 http://laws-lois.justice.gc.ca https://www.canada.ca/en/health-canada/services/environmental-workplacehealth/occupational-health-safety/workplace-hazardous-materials-information-system/whmisnews.html https://www.ccohs.ca/oshanswers/chemicals/whmis\_ghs/general.html



## 5. China (PR)

No update since 2018. China implemented UN GHS Revision 4 in 2014. Decree 591 (Regulations on the Control over Safety of Hazardous Chemicals) came into force on 1 December 2011. It is a legislation package: for example, SDS must be prepared according to SDS standard GB/T 16483-2008.

China published 28 new GHS classification standards for chemicals on 16 October 2013 (GB 30000.28-2013 and 30000.29-2013), to align the current regulation with the UN GHS Revision 4 that is mandatory since 1 November 2014.

Scope:	industrial chemicals, agrochemicals and consumer chemicals
Deadline for substances:	In force (1 November 2014)
Deadline for mixtures:	In force (1 November 2014)
Substance classification list:	Yes, classifications are mandatory
	(Chinese classification catalogue). Refer
	to the Guidance for the Implementation
	of China 2015 Catalogue of Hazardous
	Chemicals (Trial).
HazCom (SDS, label):	In Chinese language. Additional languages
	are allowed in smaller font. Guidance on
	the compilation of Safety Data Sheets
	published in December 2013 (GB/T
	17519-2013)
Additional information:	-
UN GHS reference:	UN GHS Revision 4

#### Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25758 http://www.chemsafetypro.com/Topics/China/GHS\_in\_China\_SDS\_label.html

## 6. Ecuador

Ecuador implemented UN GHS version 1 in 2018. The INEN standard 2266:2013 (Transport, storage and handling of hazardous materials – Specifications), originally voluntary as NTE INEN 2266:2006 / INEN 2288:2006, became mandatory by publication of the RTE INEN 078 (Technical Regulation on the transport, handling and storage of hazardous materials), published in May 2013, amended in 2014 to postpone the entry into force from January 2017 to February 2018, in force since.

Scope: Deadline for substances Deadline for mixtures Substance classification list HazCom (SDS, label)

In force (February 2018) In force (February 2018)

ANNEX A of the Norm describes requirements to the Safety Data Sheet. No significant deviations from GHS UN.



Not implemented classes / categories: - flammable gas 1A (pyrophoric, all

- categories of chemically unstable gases)
- flammable gas 1B
- Aerosols category 3
- Desensitized explosives, all categories
- Ozone depleting category 1

Technical Regulations are available to download in Spanish language only

Additional information: UN GHS reference:

UN GHS version 1

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25764 http://www.normalizacion.gob.ec/

#### **7.** EU / EEA

This area covers the 28 states of the EU (minus UK, should there be a Brexit) plus Iceland, Liechtenstein and Norway. Fall-back to EEA or re-joining EFTA would be two options for the UK after Brexit.

The EU/EEA implemented UN GHS in 2015 (initial version Revision 3, present version Revision 5, Revision 7 as of 17 October 2020 [except for SDS]).

The Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, called CLP, was published by the Commission on 31 December 2008 in the Official Journal. With this publication, the EU has implemented the UN Global Harmonized System (GHS) for the classification, labelling and packaging, entry into force on 20 January 2009.

Commission Regulation (EU) 2019/521 of 29 March 2019 (12<sup>th</sup> ATP amending CLP) that will be applicable on 17 October 2020, brought the CLP Regulation into line with UN GHS revisions 6 and 7.

The 13<sup>th</sup> ATP to CLP amends Annex VI with new, modified and deleted entries. The 14<sup>th</sup> ATP to CLP amends Annex VI.

Scope:	Workplace/consumer/pesticides
Deadline for substances:	In force (1 December 2012)
Deadline for mixtures:	In force (1 June 2015)
Deadlines for ATPs:	1 <sup>st</sup> ATP (EC) No 790/2009: 1 Dec 2010
	2 <sup>nd</sup> ATP(EU) No 286/2011: 1 Dec 2012
	3 <sup>rd</sup> ATP (EU) No 758/2013: 1 Dec 2013
	4 <sup>th</sup> ATP(EU) No 487/2013: 1 Dec 2014
	5 <sup>th</sup> ATP(EU) No 942/2013: 1 Jan 2015
	6 <sup>th</sup> ATP(EU) No 605/2014: 1 Jan 2016
	7 <sup>th</sup> ATP(EU) No 2015/1221: 1 Jan 2017



	8 <sup>th</sup> ATP(EU) No 2016/918: 1 Feb 2018 9 <sup>th</sup> ATP(EU) No 2016/1179: 1 Mar 2018 10 <sup>th</sup> ATP(EU) No 2017/776: 1 Dec 2018 11 <sup>th</sup> ATP (EU) No 2018/669: 1 Dec 2019 12 <sup>th</sup> ATP(EU) No 2019/521: 17 October 2020 13 <sup>th</sup> ATP (EU) No 2018/1480: 1 May 2020 14 <sup>th</sup> ATP(EU) No TBD: TBD
Substance classification list:	Yes, mandatory, with regular revisions
HazCom (SDS, label):	Safety Data Sheet according to Regulation (EC) No 1907/2006 REACH Annex II. As amended by (EU) 2015/830, it is in line with UN GHS revision 5. Regulation [XXX] brings REACH Annex II in line with UN GHS Revision 7: the deadline for application is 31 December 2022.
Additional information:	<ul> <li>Special rules for labelling and packaging of certain substances and mixtures (EU "left overs" not [yet] covered by GHS:</li> <li>additional hazard statements to be included on the label</li> <li>special rules for packaging</li> <li>special rule for labelling of plant protection products (PPP)</li> </ul>
Annex VIII of CLP	<ul> <li>Harmonized information relating to emergency health response and preventative measures:</li> <li>Consumer use: 1 Jan 2021</li> <li>Professional use: 1 Jan 2021</li> </ul>
UN GHS reference:	<ul> <li>Industrial use: 1 Jan 2024</li> <li>UN GHS Revision 5</li> <li>(Revision 7 after 17 October 2020)</li> </ul>

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25881 https://echa.europa.eu/regulations/clp/legislation

#### 8. Indonesia

Indonesia implemented UN GHS in 2016 (initial version Revision 2 in 2009, present version Revision 4).

 Regulation of the Ministry of Industry No 87/M-IND/PER/9/2009 (Regulation 87/2009), issued on 24 Sep 2009 becoming applicable on 12 April 2013. This Regulation was revised by Decree No 23/M-IND/PER/4/2013 in May 2013, updating it to UN GHS Revision 4. In addition to classification and labelling, the Regulation includes provisions on SDS (16 sections).



- This regulation is also supported by a technical guidance of the Director-General of Agriculture and Chemical-Based Industry on GHS (No 21/IAK/PER/4/2010, signed on 14 April 2010, as revised by No 04/BIM/PER/1/2014).
- Regulation of the Ministry of Environment No Per-MENLH 3/2008 of 5 Mar 2008: requirement to put symbols and labels on hazardous and toxic substances in line with GHS requirements. The symbols and labels are required for the packaging of hazardous and toxic substances as well as for storage and transportation.
- Regulation of the Minister of Trade No. 44/M-DAG/PER/9/2009, in force since 15 Nov 2009: Supply, Distribution and Supervision of Hazardous Materials – Annex I and II list regulated hazardous materials, Annex III contains specifications for GHS SDS, Annex IV contains pictograms and hazard statements to include on labels. CLP Building blocks are used as benchmark.
- There are several reporting duties under Regulations 87/2009 and 44/2009.

Scope:	Chemical substances and mixtures. Exception: pharmaceuticals, food additives, cosmetics, and pesticide residues in food w not be covered by the GHS.
Deadline for substances:	In force (24 March 2010), grace period ended 12 July 2013
Deadline for mixtures:	In force (December 2013, grace period ended 31 December 2016)
Substance classification list:	-
HazCom (SDS, label):	SDS (all substances and mixtures) aligned to UN GHS. CBI-specific requirements apply (Product Identifier in SDS can be excepted for CBI purposes, as long as it is not against health, security, safety and environmental aspects)
Additional information:	-
UN GHS reference:	UN GHS Revision 4

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25778 http://kemenperin.go.id/ghs

#### 9. Japan

Japan implemented UN GHS Revision 4 in 2011 and Revision 6 in 2019, but it is mandatory only for a limited number of substances (Article 57 ISHL).

UN GHS has been adopted in Japan since 2006 by means of amended laws (Industrial Safety and Health Law ISHL, Poisonous and Deleterious Substance Control Law PDSCL, Ordinance and Guideline under Pollutant Release and Transfer Register Law PRTR) and Japanese Industrial Standards (JIS).

The standard for SDS and labelling (JIS Z 7253:2019 – hazard communication for GHS labelling and SDS) is in line with UN GHS Revision 6. GHS classification is according to JIS Z 7252:2019



(chemical classification for GHS labelling), likewise based on UN GHS revision 6. These JISs were published on 25 May 2019.

Actually, the full GHS implementation for all chemicals is not required by any Japanese law or regulation. Local laws only recommend industry to make efforts to follow the relevant JIS and their due date for all chemical products. However, GHS SDS and labels are mandatory for a limited number of substances (and mixtures containing them) only, as determined by Article 57 of the ISHL law.

The Ministry of Health, Labour and Welfare (MHLW) amended the ISHL law from 1 July 2018, extending the mandatory requirement for GHS label from the previous 104 substances to match the 673 substances that already required the mandatory GHS SDSs. Clarification on the cut-off values for the substances that trigger mandatory GHS label (and SDS for mixtures containing them) were also part of the update.

A supplementary document to the operation manual of the GHS mixture classification system has been published by the Ministry of Economy, Trade and Industry (METI). It is called the 'refinement of precautions' sheet and corresponds to page four of the manual. The sheet explains how the classification system filters the precautionary statements for chemicals that should be included on labels.

The recommendations indicate which statements should be prioritised on labels.

METI has also updated the GHS mixture classification system (version 4.0), which is available on its website. There is (voluntary) software for GHS classification of mixtures.

Scope:	Industrial, workplace
Deadline for substances:	(Consumer products: voluntary) In force (for named substances since 2011)
Deadline for mixtures:	In force (for specified mixtures since
Substance classification list:	2011) Yes, for 3095 substances.
	National Institute of Technology and Evaluation (NITE) GHS classification
HazCom (SDS, label):	results are non-mandatory. JIS Z 7253:2019
	Obligatory: SDS with 16 headings.
Additional information:	-
UN GHS reference:	UN GHS Revision 6

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25783 https://www.mhlw.go.jp/english/index.html http://www.meti.go.jp/english/index.html http://www.safe.nite.go.jp/english/ghs/ghs\_index.html https://www.nite.go.jp/en/chem/chrip/chrip\_search/systemTop https://www.nite.go.jp/en/chem/chrip/chrip\_search/intSrhSpcLst?\_e\_trans=&slScNm=RJ\_04\_ 021&cngLngMd=1



## 10. Malaysia

Malaysia implemented UN GHS Revision 3 in 2015. It published its CLASS regulation (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) on 11 October 2013, to implement UN GHS Revision 3 (enforced from 12 October 2013).

The Industry Code of Practice (on Chemical Classification and Hazard Communication, ICOP) was gazetted on 16 April 2014 to provide guidance. A 1-year preparation period was provided; CLASS is fully enforced since 17 April 2015. Malaysian ICOP list includes mandatory classifications of substances.

Scope:	Chemical substances and mixtures, workplace
Deadline for substances:	In force (17 April 2015)
Deadline for mixtures:	In force (17 April 2015)
Substance classification list:	Yes, ICOP list (about 229 chemicals with mandatory classification)
HazCom (SDS, label):	<ul> <li>Dual language SDS and labels required.</li> <li>Label to contain maximum of 6 P- statements.</li> <li>SDS needs to be reviewed every 5 years, or earlier when new information is</li> </ul>
	available.
Additional information: UN GHS reference:	Adopts same building blocks as EU UN GHS Revision 3

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25791 http://www.federalgazette.agc.gov.my/outputp/pua\_20131011\_P%20U%20%20%28A%29%20 310-peraturanperaturan%20keselamatan%20dan%20kesihatan%20pekerjaan%20%28pengelasan%20pelabel an%20dan%20helaian%20data%20keselamatan%20bahan%20kimia%20berbahaya%29%20201 3.pdf

http://www.dosh.gov.my/index.php/chemical-management-v/class-regulations

#### 11. Mexico

Mexico implemented UN GHS in October 2018 (initial version Revision 3 on a voluntary basis, present version Revision 5).

On 9 October 2015, Mexico published its national implementation of the UN GHS Revision 5 on hazard communication as Norma Oficial Mexicana NOM-018-STPS-2015 ("Harmonized system for the identification and communication of hazards and risks from hazardous chemicals in the workplace" [Sistema armonizado para la identificación y comunicación de peligros y riesgos por sustancias químicas peligrosas en los centros de trabajo], STPS = Ministry of Labour and Social Welfare; with a three-year transition period). On 8 October 2018 it become mandatory. (Official standard NOM-018-STPS-2000 is repealed.)



The standard regulates the use of chemical substances and mixtures in the workplace, but makes no obligations relative to the SDSs provided by suppliers. Nonetheless, the NOM offers perspective on what elements will best serve Mexican customers who must comply with the standard in the workplace.

Chemical labels must include physical and health hazards. The STPS confirmed that for interpretation of this standard, the chemical industry may use the standard NMX-R-019-SCFI-2011, and that environmental hazards are not mandatory on the label.

Scope: Deadline for substances: Deadline for mixtures:	Workplace. It does not apply to pharmaceuticals, food additives, cosmetics articles, pesticide residues in food, hazardous waste In force (October 2018) In force (October 2018)
Substance classification list:	-
HazCom (SDS, label):	SDS with 16 sections. The content in sections 12-15 is not regulated by the Ministry of Labour and Social Welfare but must comply with requirements of the responsible agencies. Label: there are deviations from GHS. The voluntary standard NMX-R-019-SCFI-2011 indicates the size of the GHS pictograms
Additional information:	The NOM-018-STPS-2015 adopts all building blocks of UN GHS revision 5
UN GHS reference:	UN GHS Revision 5

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25799 http://www.economia-noms.gob.mx/normas/noms/2010/018stps2015.pdf http://dof.gob.mx/nota\_detalle.php?codigo=5541067&fecha=16/10/2018

#### 12. New Zealand

New Zealand implemented UN GHS in 2006. The original HSNO act was based on a draft of a prepublished GHS version of 2003, lacking end-points with classification and terminology. More recently, the 'Health and Safety Reform Bill' was passed in New Zealand Parliament at the end of August 2015. This made changes to the 'Hazardous Substances and New Organisms (HSNO)' Act through the 'Hazardous Substances and New Organisms Amendment Act, 2015'. The EPA was to issue EPA Notices to set rules under HSNO. A consultation document was issued and closed (in 2016) for four proposed EPA notices on *"Classification, labelling, safety data sheets, packaging* – proposals for change", the aim of which was to bring the HSNO hazardous substances classification system in line with UN GHS Revision 5, with a two-year transition period being proposed for all aspects. However, unlike the previous indications of 2014, it has now issued the notices (July 2017) which carry over the classification system for hazardous substances established prior to the enactment of this notice (see EPA Hazardous Substances [Classification] Notice 2017 and Hazardous Substances [Minimum Degrees of Hazard] Notice 2017).



Until 9 January 2020, New Zealand's EPA consults on adopting GHS Revision 7, in accordance with the commitments made by other countries. They propose not to adopt acute toxicity Category 5, skin irritation Category 3, or aspiration hazard Category 2, but to adopt aquatic toxicity Categories Acute 1–3 and Chronic 1–4. If the proposal is approved, it would make GHS 7 classifications obligatory; the Hazardous Substances Notice 2017 would be revoked and HSNO classifications/numbering would be discontinued. It would then also become possible to use the luclid database and share data with other regulatory agencies. EPA would implement the changes via a new classification notice (with reference to GHS 7), to be published in mid-April 2021, plus making necessary amendments to other EPA notices. A four-year transitional period until 1 December 2023 would be applied for companies to re-label/re-package products and prepare new SDSs.

The EPA will also consult with industry on how best to convert all HSNO approvals to GHS 7 classifications (proposed GHS classifications if a substance has already an HSNO classification / how to tackle the list of about 5,600 substances that were approved before 1 December 2017 – group standard, revoke, reissue with GHS?).

Scope:	-
Deadline for substances:	In force (2006)
	SDS compliance by 30 June 2008, but full
	GHS compliance for labels were not
	required before 30 June 2010
Deadline for mixtures:	In force (2006)
Substance classification list:	HSNO Chemical Classification Information Database (CCID) can be used to find
	detailed hazard and physical information
	about single chemicals for use in hazard
	classifications and safety information. It
	also has GHS classifications.
HazCom (SDS, label):	GHS-compliant SDSs are required.
	However, Australian, European and US
	labels are accepted for mixtures; pure
	substances require NZ GHS labels.
Additional information:	Differences between GHS and the HSNO
	hazard classes and categories.
	<ul> <li>All GHS hazard classes and categories were implemented, though HSNO does</li> </ul>
	not separate reversible eye effects into 2
	subcategories, or separate CMR
	categories 1A and 1B
	- HSNO does not distinguish between
	STOT single exposure or repeated
	exposure. STOT single exposure cat 3 is
	not implemented.
	<ul> <li>- 3 additional terrestrial endpoints for environmental</li> </ul>
UN GHS reference:	UN GHS Revision 5
	(+ New Zealand-specific information)



Country-specific information:

<u>http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c43070</u> <u>https://www.epa.govt.nz/database-search/chemical-classification-and-information-database-ccid/</u>

https://www.epa.govt.nz/assets/Uploads/Documents/Hazardous-Substances/EPA-Notices/Hazardous-Substances-Classification-Notice-2017.pdf

https://www.epa.govt.nz/assets/Uploads/Documents/Hazardous-Substances/EPA-Notices/Hazardous-Substances-Safety-Data-Sheets-Notice-2017.pdf

https://www.epa.govt.nz/assets/Uploads/Documents/Hazardous-Substances/EPA-Notices/Hazardous-Substances-Labelling-Notice-2017.pdf

https://www.epa.govt.nz/news-and-alerts/latest-news/consultation-opens-on-changes-tochemical-classification-and-labelling/

#### **13.**Philippines

No update since 2018. The Philippines implemented UN GHS Revision 5 in 2015 (DOLE) or will be doing so in 2019 (DENR).

The Department of Labour and Employment (DOLE) has released GHS guidelines (= Guidelines for the Implementation of Globally Harmonized System (GHS) in Chemical Safety Program in the Workplace, Department Administrative Order No. 136-14) on 6 March 2014, requiring that ALL chemicals were to be classified according to the latest version of UN GHS (= Revision 5, at that time). Compliance with the guidelines was required within one year of their taking effect, with the effective date occurring 15 days after publication. The eventual deadline was 15 July 2015.

The Department of Environment and Natural Resource (DENR) Administrative Order (Rules and procedures for the Implementation of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) in preparation of Safety Data Sheets (SDS) and Labelling requirements of toxic chemical substances, DAO No. 2015-09), implementing GHS, entered into force on 12 June 2015. The environmental management bureau (EMB) issued a Memorandum Circular No. 2015-011 as Guidance Manual. DENR requires the implementation of GHS classifications in four phases, through to 2019.

Scope:	Chemicals used in the workplace. Pharmaceuticals, food additives, cosmetics, and pesticide residues in food shall not be covered at the point of intentional intake, except at the workplace and during transport.
Deadline for substances (DOLE):	In force (July 2015)
Deadline for mixtures (DOLE):	In force (July 2015)
Deadline for substances (DENR):	In force (2018)
Deadline for mixtures (DENR):	Not in force (2019)
Substance classification list:	-
HazCom (SDS, label):	16 section SDS, available to workers
Additional information:	Building blocks most likely aligned with
	EU – no final decision yet
UN GHS reference:	UN GHS Revision 5



Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25861 https://www.dole.gov.ph/?s=DO+136-14.pdf http://www.chemsafetypro.com/Topics/Philippine/DENR\_2015\_09\_GUIDANCE\_MANUAL\_On\_ Chemical\_Classification\_SDSs\_and\_Labels.pdf

#### 14.Serbia

No update since 2018. Serbia implemented UN GHS in 2015. In analogy to the EU, there was a transition period for substances (until 30 September 2011) and for mixtures (31 May 2015). The Serbian implementation follows EU CLP.

National legislation adopting GHS was adopted on 29 June 2010. It was published in the Official Gazette of the Republic of Serbia on 10 September 2010 and entered into force on 18 September 2010. Subsequently, Serbia published rulebooks on GHS (No 105/13 of 29.11.2013) and SDS (No 100/11 of 29.12.2011).

The competent authority for implementation of this legislation is the Serbian Chemicals Agency. This GHS-implementing legislation aligns Serbian system of classification, labelling and packaging of chemicals with the United Nations Globally Harmonized System (GHS) and is in compliance with EU CLP Regulation (Regulation (EC) 1272/2008). However some legislative differences until EU accession is completed (e.g. no C&L notification to the C&L inventory required).

Scope: Deadline for substances: Deadline for mixtures: Substance classification list: HazCom (SDS, label): Additional information: UN GHS reference: Workplace/consumer/pesticides In force (October 2011) In force (June 2015) Align to EU -Align to EU -Align to EU CLP (= GHS revision 5?)

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25868

#### 15. Singapore

Singapore fully implemented UN GHS in 2015 (for manufacturers and suppliers) and 2016 (for users), respectively (initial version Revision 2, present version Revision 4).

Singapore adopted UN GHS in 2008 and later introduced separate transitional periods for manufacturers/suppliers vs users and for substances vs mixtures). There was a revision in 2011 to implement UN GHS Revision 2 and subsequently an update on 7 March 2014, to implement UN GHS Revision 4. Requirements are laid out in the standard SS 586:

 SS 586 Part 1:2014 – Specification for hazard communication for hazardous chemicals and dangerous goods – Part 1: Transport and storage of dangerous goods. Adopts the United Nations Recommendations on the Transport of Dangerous Goods and provides standard hazard communication labels. Applies to the transportation and storage of dangerous goods by road in Singapore.



- SS 586 Part 2:2014 Specification for hazard communication for hazardous chemicals and dangerous goods – Part 2: Globally harmonised system of classification and labelling of chemicals – Singapore's adaptations
- SS 586 Part 3:2014 Specification for hazard communication for hazardous chemicals and dangerous goods Preparation of safety data sheets (SDS)

The building blocks Flammable Liquids category 4 (except diesel), acute toxicity category 5; skin corrosion/irritation category 3; aspiration hazard category 2; acute hazard to aquatic environment category 2 and 3; and chronic hazard to the aquatic environment category 3 and 4 are not part of the implementation.

A guidebook on GHS has been published by Singapore Chemical Industry Council Ltd (SCIC) and is available on the Workplace Safety and Health Council website. It provides additional guidance for GHS classification, labelling and SDS.

Scope:	a) Manufacturers and suppliers
Deadline for substances:	In force (July 2015)
Deadline for mixtures:	In force (July 2015)
Scope:	b) users
Deadline for substances:	In force (July 2015)
Deadline for mixtures:	In force (1 July 2016)
Substance classification list:	-
HazCom (SDS, label):	- Label to contain maximum of 6 P-
	statements.
	- SDS and labels to be reviewed every 5
	years, or earlier when new information is
	available.
Additional information:	-
UN GHS reference:	UN GHS Revision 4

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25869 www.mom.gov.sg https://sso.agc.gov.sg/SL/WSHA2006-RG1 https://www.wshc.sg/files/wshc/upload/cms/file/GHS Booklet.pdf

#### 16. South Korea

South Korea implemented UN GHS in 2013 (initial version Revision 3, present version Revision 4). The implementation of UN GHS is done through various governmental bodies under different laws/regulations in Korea. The major chemicals regulations that were adapted to GHS were the *Industrial Safety & Health Law* (ISHL), plus the *Standard for Classification and Labelling of Chemical Substance and Material Safety Data Sheets* (MoEL Public Notice 2016-19, as amended), and the *Toxic Chemicals Control Act* (TCCA) which is now revised to *Chemical Control Act* (CCA) in 2015, plus classification standard and the regulation for labelling of Toxic Chemicals (NIER Notice No 2008-26, as amended), by Ministry of Employment & Labor (MoEL) and Ministry of Environment (MoE), respectively. GHS was/is not adopted with respect to consumer products and cosmetics.



The standard implemented by MoEL was valid for all chemicals in the workplace and was updated in 2013 (MoEL Public Notice 2013-37). In addition, the *Korean Occupational Safety and Health Agency* (KOSHA), under MoEL, publishes hazard classification and labelling, partly including complete SDS, for > 6000 chemical substances on their homepage. These classifications are for reference only and are not mandatory; self-classifications are allowed.

MoE regulates chemicals based on substance lists under TCCA (e.g. designated chemicals).

The *National Institute of Environmental Research* (NIER) under MoEL published GHS classification for a number of substances (latest update: NIER Public Notice No. 2018-21). These GHS classifications are mandatory for designated hazardous chemicals under CCA.

There are editing tools for creating SDS according to the GHS (Korean only) and labels (English and Korean), and a GHS classification and labelling program for mixtures.

Hazard classification of substances is not harmonized between NIER and KOSHA, i.e. a high number of substances were classified differently. MoEL and MoE show different perspectives in adopting certain hazard categories. The two ministries are working to better coordinate their implementations; harmonisation mostly done with MoEL public notice 2009-68.

Scope: Deadline for substances:	Workplace In force (MOE: 1 July 2010; MOEL: 1 July 2011)
Deadline for mixtures: Substance classification list:	In force (MOE/MOEL: 1 July 2013) MOE: listed "toxic" substance classifications are mandatory. MoEL classifications published by KOSHA are non-mandatory.
HazCom (SDS, label):	<ul> <li>SDS and label must be provided in Korean language (with exemptions for reagents for test and research, finished products in storage or transit for export, if labelled in accordance with UN RTDG up to the first destination after customs clearance, product labelled according to other regulation [e.g. TCCA]).</li> <li>Section 1 MSDS needs supplier information and emergency contact based in Korea</li> <li>(A1), (A2) carcinogenicity has to be stated with exposure limit in chapter 11 (Not chapter 8)</li> </ul>
Additional information:	Cut off value/concentration limit for mixtures: same as EU.
UN GHS reference:	UN GHS Revision 4

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25864 http://www.chemsafetypro.com/Topics/Korea/GHS\_in\_Korea\_SDS\_label.html http://ncis.nier.go.kr/en/main.do http://msds.kosha.or.kr/kcic/english/msdssearch.do



## 17.Switzerland

Switzerland implemented UN GHS Revision 5 in 2015.

UN GHS was adopted on 1 February 2009 and meanwhile fully in force for both substances and mixtures. Like in the EU, there was a transition period for substances (1 December 2012) and mixtures (1 June 2015). Switzerland has extensively harmonized its law with the provisions of the EU CLP. The regulatory reference is *Ordinance on Protection against Dangerous Substances and Preparations* (ChemO) (SR 813.11), Revision 5 June 2015, (version 1 March 2018) and *Ordinance on the Placing on the Market and Handling of Biocidal Products* (OBP) (SR813.12), Revision 18 Mai 2005 (version 1 March 2018).

With the last revision of the Swiss Chemicals Ordinance, the following changes were implemented by 1 July 2019:

- Chemicals Ordinance, Annex 2, para 1: Technical Regulation for the classification, labelling and packaging of substances and mixtures; Adaption of the list of harmonized classifications in accordance with the EU CLPV:
  - Correction on the 10. ATP;
  - $\circ$  12. ATP to the EU CLPV: Implementation of the changes of UN GHS
  - 13. ATP to the EU CLPV: Inclusions and changes in Annex VI of the EU CLPV (harmonized classifications, in Switzerland mandatory (binding) as of 01.03.2020)

With the next revision of Annex 2 Chemicals Ordinance by 1 March 2020, the following has been announced by the Swiss authorities:

- 14. ATP to EU CLPV:
  - Inclusion of 17 substances;
  - Change of 11 existing entries;
  - Deletion of 2 entries.
  - Implementation of the latest developments on testing methods for substances and mixtures (in accordance EU, OECD und UN).

Workplace/consumer/plant

Scope:

	protection/biocides
Deadline for substances:	In force (1 December 2012)
Deadline for mixtures:	In force (1 June 2015)
Substance classification list:	Yes. Annex VI of EU CLP (EU) 2017/776
	(ATP 10) implemented (= mandatory for
	classification) in Switzerland, with
	transition until 30 November 2018; legally
	possible for Switzerland to deviate from
	EU CLP
HazCom (SDS, label):	An SDS created according to EU REACH is
	acceptable in Switzerland if the following
	sections have been updated according to
	Swiss law (Section 1, 7, 8, 13 and 15).
	No CSR needed, only exposure scenario
	(ES).



For labels in addition to EU CLP, labels without Swiss producer/importer are allowed if the product is for professional end-users and they receive a Swiss SDS. For products available to the public, the information on the Swiss producer/importer must be on the label. Labels in at least two Swiss official languages; in case of professional endusers in at least one official language or English. Special regulations apply to aerosols, chemicals that have a different definition under EU CLP and ChemO, requests for alternative naming conventions as well as minimal labelling requirements for exports. Additional hazard classes of UN GHS are accepted on product labels. Notification requirements specific to Switzerland (ChemO) **UN GHS Revision 5** 

Additional information:

UN GHS reference:

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25874 https://www.anmeldestelle.admin.ch/chem/en/home/themen/pflichthersteller/selbstkontrolle/kennzeichnung.html https://www.anmeldestelle.admin.ch/chem/de/home/themen/rechtwegleitungen/wegleitungen-interpretationshilfen.html

## 18. Taiwan

Taiwan implemented UN GHS in 2017 (initial version Revision 2, present version Revision 4). It published its adoption of UN GHS by publication in 2007. Notice no. 1020146801 started in October 2008, based on UN GHS Revision 2. The national standard on chemicals classification and labelling, CNS 15030, was subsequently aligned with UN GHS revision 4 in 2014. This update was reported to take 'immediate effect' – i.e. from 1 December 2014. The regulatory instruments are:

- Regulations of Labelling and Communication of Hazardous Chemicals (Directive of the Executive Yuan Council of Labor Affairs, Labor Affairs No. 10302007861, 27 June 2014) – "MoL Regulation" – no environmental hazard categories
- Management Measures on Toxic Substances Labelling and Safety Data Sheet (EPA No.1030094561, 10 November 2014) – "EPA Regulation" – Taiwan National Standard, CNS 15030: Classification and Labelling of Chemicals

There is a recommended GHS classification list which counts 6000 substances. It implements all hazard categories. Substances listed on CLA Dangerous Goods / EPA TCCL lists and products do contain these. The total sum is divided into the following four phases:

• Phase 1: CLA Dangerous Goods (1062 substances), EPA TCCL lists (259 substances),



- Phase 2: CLA (1089 substances)
- Phase 3: 1000 substances
- Phase 4: all substances

Taiwan implemented GHS stepwise: Phase 1 by 31 December 2009, Phase 2 by 31 December 2011, Phase 3 by 31 December 2013 and finally Phase 4 by 31 December 2016.

On 5 August 2019, the Council of Agriculture of Taiwan issued the 'Amendment on Various Articles of Regulations for the Labeling of Agro Pesticides' (修正「農藥標示管理辦法」 部分條文) to incorporate pesticides into the application scope of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The required label elements have been revised to bring these products into compliance with the CNS 15030, which is the implementing standard for GHS in Taiwan. No effective date has been specified for this amendment.

Scope:	-
Deadline for substances:	In force (Named substances: January 2009)
Deadline for mixtures:	In force (January 2017)
Substance classification list:	3 'advisory' SDS/labels lists, and list of non-mandatory GHS classifications, now published
HazCom (SDS, label):	-
Additional information:	<ul> <li>Relabel imports</li> <li>Adopts all GHS elements, except for environmental aquatic hazard pictogram</li> </ul>
UN GHS reference:	UN GHS Revision 4

Country-specific information:

https://www.epa.gov.tw/mp.asp?mp=epaen https://english.mol.gov.tw/ and http://www.epa.gov.tw https://laws.mol.gov.tw/Eng/EngContent.aspx?msgid=483 https://gazette.nat.gov.tw/egFront/detail.do?metaid=69557&log=detailLog https://gazette.nat.gov.tw/egFront/detail.do?metaid=72195&log=detailLog https://gazette.nat.gov.tw/egFront/detail.do?metaid=109099&log=detailLog

## 19. Thailand

Thailand implemented UN GHS Revision 3 in 2017 (for industrial chemicals). For disinfectants products it will be 2020, and for consumer and household products it will be 2029.

The Thai regulation from 2011, effective from 13 March 2012, is based on UN GHS Revision 3. There was a transitional period defined: for substances 13 March 2013 and for mixtures 13 March 2017. The three relevant regulations are:

1. MOI (Department of Industrial work)

Regulation: The notification of Ministry of Industry - Hazard Classification and Communication system of Hazardous Substances B.E. 2555 (12 March 2012)

Timeline for substances: 13 March 2013, and for mixtures: 13 March 2017.



2. MOPH (Hazardous Control Group, FDA)

Regulation: The notification of Ministry of Public Health RE: Hazard Classification and Communication System of Hazardous Substances B.E. 2558 (2015)

Timeline for substances: 20 March 2016, and for mixtures: 20 March 2020

3. MOAC (Department of Livestock Development)

The notification of Ministry of Agriculture and Cooperatives RE: Hazard Classification and Communication System of Hazardous Substance B.E. 2558 (2015)

Timeline for substances: 11 July 2016, and for mixtures: 11 July 2020

Scope:	Currently applies only to Industrial chemicals, Disinfectants products, and Consumer and Household products, regulated under Thailand Hazardous Substances Act 2535
Deadline for substances:	In force: Industrial Chemicals (13 March 2013) Disinfectants products (20 March 2016) Consumer and Household products (11 July 2016)
Deadline for mixtures:	Partly in force: Industrial Chemicals (13 March 2017) Disinfectants products (20 Mar 2020) Consumer and Household products (11 July 2029)
Substance classification list:	Department of Industrial Works (DIW) classifications are non-mandatory.
HazCom (SDS, label):	SDS template published in December 2013.
Additional information:	-
UN GHS reference:	UN GHS Revision 3

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25875 https://www.diw.go.th/hawk/en/index.php http://www.fda.moph.go.th/sites/Hazardous/SitePages/GHS.aspx http://www.fda.moph.go.th/sites/Hazardous/SitePages/KM.aspx http://afvc.dld.go.th/index.php/2016-04-03-03-29-13/538-ghs-globally-harmonizedsystem-forclassificationlabeling-of-chemical

#### 20. Turkey

Turkey implemented UN GHS in 2016. The Turkish Regulation on Classification, Labelling and Packaging of Substances and Mixtures (SEA regulation) was published in the Official Gazette No.



28848, dated 11 December 2013, and came into force on the date of publication, except for C&L notification related article (Article 41) which entered into force on 1 June 2015.

The scope is the same as the EU CLP. The transition period for substances was 1 June 2015 (1 June 2016 for mixtures). Like EU CLP, notification of hazardous substances into a *classification and labelling inventory* is required. Industry was required to notify the classification of all existing substances to a new Turkish Inventory between 1 June 2014 and 1 June 2015. After 1 June 2015, new substances (with a hazard classification, resulting in classification of the product [i.e. substance as such or in mixture or in article and being released]) must be notified within one month of their being placed on the market.

Substances and mixtures already labelled and placed on the Turkish market before the abovementioned deadlines had a 2-year transition period and did not need to be relabelled until 1 June 2017 (substances) or 1 June 2018 (mixtures).

The regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (KKDİK, aka Regulation 30105, Turkish REACH or TR-REACH), published on June 2017, contains an Annex 2 which sets the requirements of Turkish SDS. Transition date is 31 Dec 2023; on that date the currently existing Regulation on Safety Data Sheets) will be repealed. The SDS requirements are aligned with EU/453/2010.

The Turkish Ministry has in December 2018 opened for comments a Draft regulation on "Classification Labelling and Packaging of Substances and Mixtures". The regulation is prepared to be in harmonization with the 13<sup>th</sup> ATP of EU CLP. In regard to Poison Center notification provisions, the current draft states that the Ministry of Health is in charge of this, with a time frame of January 2025.

Scope:	Chemicals except medical/pharmaceuticals, cosmetics, food, feed, radioactive substances, non- isolated intermediates, wasted and national defense industry
Deadline for substances:	In force (1 June 2015)
Deadline for mixtures:	In force (1 June 2016)
Substance classification list:	Like CLP Annex VI as amended with ATP
	3. The classifications of boric compounds
	with carcinogenic classification are
	different (i.e. not classified as
	carcinogenic).
HazCom (SDS, label):	SDS and labels must be in Turkish
	language. Safety Data Sheets must be
	authored by a certified person and
	certificate information should be written
	under Section 16 of the SDS.
	SDS must be prepared according to KKDIK after 31 December 2023. Until the end of
	2023, SDS could also be prepared
	according to SDS regulation (29204).
Additional information:	Notification requirement like CLP.
Additional information.	Notification requirement like cer.



C&L Notification to C&L inventory will also apply after implementation, within 1 month, so starting from 1 Jun 2014. UN GHS Revision 4 The current version is aligned to 3<sup>rd</sup> ATP of EU CLP, with exemption on boric compounds.

UN GHS reference:

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c53177

#### 21. Uruguay

No update since 2018. Uruguay implemented UN GHS in 2017 (initial version first edition, present version Revision 4).

UN GHS is adopted in Uruguay since 2009 (Presidential decree 307/009, 3 July 2009, implemented GHS as published in Purple Book first edition). It came into force 120 days after publication of the decree in the Official Gazette (September 2009). The transition period was supposed to be until one year after publication (= September 2010).

The Decree contained two Annexes, which reflected the minimal contents for labelling of Chemical Products (Annex 1), and the Safety Data Sheet requirements (Annex 2).

This was amended by Decree 346/011 (28 Sept 2011) that extended the transitional periods for substances (to the end of 2012) and for mixtures (to the end of 2017), notably to extend the transitional period for the implementation of GHS labelling at the workplace, and the adoption of UN GHS Revision 4.

Scope:	-
Deadline for substances:	In force (December 2012)
Deadline for mixtures:	In force (December 2017)
Substance classification list:	-
HazCom (SDS, label):	Yes
Additional information:	-
UN GHS reference:	UN GHS Revision 4

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25878

#### 22.USA

The USA implemented UN GHS Revision 3 in 2015, but it also includes pre-GHS hazard categories such as 'dust explosion' and 'hazards not otherwise specified'. Environmental hazard classes are not part of the Hazard Communication Standard (HazCom, HCS 2012). The HazCom standard was published on 26 March 2012 (29CFR1910:1200). In February 2016, OSHA issued the hazard classification guidance document.



In August 2019 OSHA and Health Canada issued three new joint guidance documents to support implementation of GHS:

- 1. Comparison of Regulatory Processes provides a side-by-side comparison chart of the regulatory processes in Canada and the United States for hazardous products in the workplace.
- Label Comparison for Shipped Containers compares requirements for shipped labels under OSHA's HazCom 2012 standard and with Canada's Hazardous Product Regulations (HPR). It will be particularly useful for chemical manufacturers and suppliers who ship chemical products to both countries.
- 3. Guidance on Hazards Not Otherwise Classified contains guidance regarding shipped labels for Hazards Not Otherwise Classified (HNOC), Physical Hazards Not Otherwise Classified (PHNOC), and Health Hazards Not Otherwise Classified (HHNOC). The complicating issue for chemical manufacturers of products with these hazard classifications is that HazCom 2012 does not require label elements for HNOCs, whereas under the HPR, label elements are required PHNOCs and HHNOCs.

OSHA is also working on updating the HazCom 2012 to bring it in line with the UN GHS Revision 7, but postponed multiple times. Current plan is December 2019.

Scope: Deadline for substances: Deadline for mixtures: Substance classification list: HazCom (SDS, label):	Workplace In force (May 2015) In force (May 2015) - Exposure limits should be included in SDSs: OSHA PEL's and other OELs; Unclassified hazards: info on labels under supplementary information, on SDS under section 2; SDS section 12-15 not mandatory and not enforced by OSHA, however needed to be consistent with UN GHS; Hazards not otherwise classified: should be on MSDS, but not on
Additional information: UN GHS reference:	label 'Left-over' classifications included in HCS. The USA are currently looking to update to the latest version of the UN GHS, most likely this will be revision 7, but possible revision 8. Update has been postponed several times. Current timeline is December 2019, but it is likely this will be postponed again. UN GHS Revision 3

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25877 https://www.osha.gov/laws-regs/federalregister/2012-03-26 https://www.osha.gov/dsg/hazcom/ https://www.osha.gov/dsg/hazcom/loi\_listing.html



https://www.osha.gov/pls/oshaweb/owaquery.query\_docs?src\_doc\_type=INTERPRETATIONS& src\_anchor\_name=1910.1200&src\_ex\_doc\_type=INTERPRETATIONS&src\_unique\_file=I201403 04B

#### 23. Vietnam

Vietnam implemented UN GHS in 2016 (initial version Revision 3, present version Revision 4). Standards for classification and labelling of chemicals, implementing parts of the GHS, have been in place in Vietnam since 1999. In particular:

- Chemical Law, Decree 108/2008/ND-CP dated 7 October 2008: requirements for SDS (Appendix 1 to 5 list chemicals triggering certain restrictions or obligations)
- Decree 89/2006/ND-CP: requirements for labelling
- Circular No. 28/2010: requirements for SDS (form, content) (article 40 and appendix 17)

The Vietnamese Ministry of Industry and Trade (MOIT) published the first Vietnamese GHS implementation in 2008, establishing classification and labelling requirements for substances and mixtures based on GHS Revision 3 (Circular 04/2012/TT-BCT: CHS on GHS label, 13 February 2012, implementation date 30 March 2012). Aspiration Hazard and STOT-SE, Category 3 were not implemented. Subsequently, Vietnam adopted UN GHS Revision 4. The transition period for substance ended on 30 March 2014 and for mixtures on 30 March 2016.

Apart from industrial chemicals, Vietnam also investigates other areas to apply GHS. These areas are:

- For insecticides and disinfectants used in household and for medical use
  - Classification and labelling: 1 July 2018
- For pesticides and agricultural chemicals
  - Classification and labelling: 1 August 2020
- For other chemicals
  - Classification and labelling:
    - Substances: 30 March 2014 (original deadline)
    - Mixtures: 30 March 2016 (original deadline)
    - Substances and mixtures: 28 December 2017 (enforcement of Circular 32/2017)
  - SDS:
     1 January 2011 (original deadline)
     28 December 2017 (enforcement of Circular 32/2017)

UN GHS classifications are regulated in Decree 113/2017/ND-CP (Decree to provide guidelines in chemical management), Chapter IV Article 23. Safety data sheet requirements are laid down in Decree 113/2017/ND-CP: Chapter IV, Article 24 and Circular 32/2017/TT-BCT: Article 7 and Annex 9. Labelling requirements are laid down in Decree 43/2017/ND-CP.



Scope:

Deadline for substances: Deadline for mixtures: Substance classification list:

HazCom (SDS, label):

Decree 113/2017/ND-CP does not define clearly the application scope which requires to follow GHS requirements. The interpretation of Decree 113 should be regulating the hazardous chemical substances with chemical-related activities (produced, imported and circulated) in the territory of Vietnam In force (March 2014) In force (March 2016) Not decided yet. National Chemical Database has non-mandatory GHS Classifications.

No fixed SDS template regulated. -Declaration/disclosure of hazard components on SDS. Not specified clearly. But if the following substances in mixture that required full information in both SDS and label for:

- Respiratory Sensitizer Cat 1
- Carcinogenic substance Cat 1 & 2
- Toxic to reproduction Cat 1-2
- STOT (single) Cat 1-3

- STOT (repeated) Cat 1-2 The reference SDS template can be viewed in Circular 32/2017/TT-BCT, Annex 9. As for labelling, Decree 43/2017/ND-CP (Decree on goods labelling), Article 7 stated that mandatory information on the label must be written in Vietnamese language the following information with Latin letter and name/address of the foreign enterprise relating to the manufacture of the commodity.

- Other languages are allowed in smaller font. It needs to be enclosed with the original or English version.

For the moment, they also accept English-labelled goods.

- OELs for some chemicals are listed under Ministry of Health Decision No. 3733/2002/QD-BYT

SDS follows the "old" ISO sequence:
compositional information in section 2
When new info on hazardous properties
becomes available, SDS should be



updated within 15 working days. Circular 04/2012/TT-BCT a) Writing chemical formula. For chemicals contained in pressure vessel, the loaded capacity must be written additionally.

b) For mixtures, write ingredient or quantitative ingredient such as: solid form is quantity percentage of each solid substance; liquid form is quantity percentage of each liquid substance; gas form is quantity percentage of each gas substance; solid and liquid form is quantity percentage of each solid and liquid substance.

Original label can be English or other languages but sub-labels in Vietnamese still required in Warehouse or before distribution into market.

Font size: Not regulated but the words for contents of risk warning are printed in lower- or upper-case letters with height of letters not less than 2 mm.

The name, address and phone number of manufacturers, importer or distributor of chemicals on chemical label

Full 11 elements Circular 04/2012/TT-BCT

- 1. Name of chemicals.
- 2. Code of chemical identification.

3. Warning images, warning words, risk warnings.

- 4. Measurement of prevention.
- 5. Quantitative.
- 6. Ingredient or quantitative ingredient.
- 7. Manufacture date.
- 8. Expiry date (if any).

9. Information of the manufacturer, importer and distributor.

- 10. Origin of goods.
- 11. Instruction of use and preservation.



Eight elements per Decree 43/2017/ND-CP
1. Quantity;
2. Date of manufacture;
3. Expiry date (if any);
4. Ingredients or ingredient quantities;
5. Chemical identification number (if any);
6. Warning pictograms, letters, risks (if any);
7. Prevention measures (if any);
8. Instructions for use, instructions for

storage In the new Decree 113/2017/ND-CP, UN GHS Revision 3 onwards is acceptable UN GHS Revision 4

Additional information:

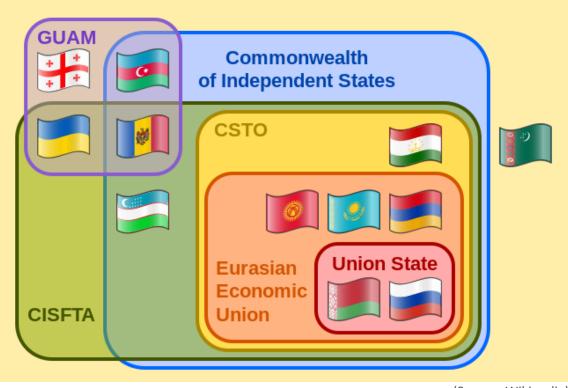
UN GHS reference:

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25879



## **GHS implementation in transition**



(Source: Wikipedia)

#### 24. Albania

No update since 2018. Draft Law "On Integrated Chemicals Management" released on 10 August 2015, with the intention of aligning various regulations with REACH/CLP/GHS ("nearly GHS"). It has been reported that Albania, which is negotiating membership of the EU notified the World Trade Organization of its plans. According to the notification, the law was due to be adopted on 23 July and come into force on 8 October. Compliance date is reported to be 29 March 2018.

#### 25.Armenia

Armenia is member of CIS and EAEU, adopting CIS and EAEU GHS standards. See 35.

#### 26. Azerbaijan

Azerbaijan is member of CIS, adopting CIS GHS standards. See 35.

## 27. Belarus

Belarus is member of CIS and EAEU, adopting CIS and EAEU GHS standards. See 35.



# 28. Colombia

Colombia has adopted UN GHS Revision 6.

Labour Ministry decree 1496 (6 August 2018) covers the manufacture, import, storage, transportation, distribution, marketing and use of chemical substances and mixtures. However, implementation dates and transitional periods were not established by Decree 1496. The following four Ministries will implement regulations per sector and set the time limits for entry into force:

- Ministry of Work for chemicals in the workplace
- Ministry of Health and Social Protection for consumer chemical products
- Ministry of Transportation for transport of hazard goods
- Ministry of Agriculture for chemical pesticides for agricultural use

Pharmaceutical products, food additives, cosmetics, pesticide residues in foodstuffs, and hazardous wastes are exempted from the application of GHS.

According to the National Business Association (ANDI), manufacturers and importers can start immediately the GHS implementation according to Revision 6, in order to start with the preparation to comply with the register decree, which will be published together with the GHS regulation.

Scope:	Chemical products at workplace and for	
	the consumers, agriculture products	
Deadline for substances:	Not yet established (proposed 3 years)	
Deadline for mixtures:	Not yet established (proposed 4 years)	
Substance classification list:	No	
HazCom (SDS, label):	-	
Additional information:	-	
UN GHS reference:	UN GHS Revision 6	

Country-specific information:

https://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25758 http://es.presidencia.gov.co/normativa/normativa/DECRETO%201496%20DEL%2006%20DE%2 0AGOSTO%20DE%202018.pdf

Latest update:

https://gallery.mailchimp.com/f22c9e1d9b8c57ce267bb40b5/files/81e4f3a1-de37-4be8-86c9-46aa972caf2a/Decreto 1496 de 2018 Sistema Globalmente Armonizado.pdf

# 29. Costa Rica

No update since 2018. Costa Rica is in still in a transition period for UN GHS and is expected to announce separate dates for substance and mixture implementations. Companies may already apply GHS/CLP regulations to their products. The Government of Costa Rica has issued in 2017 two executive decrees related to GHS implementation

Technical regulation RTCR 478:2015 has entered into force on 2 May 2018. It defines different transitional periods for the gradual renewal of registrations and notifications relating to import of hazardous raw materials obtained before its entry into force.

In addition, executive decree No. 40.457-S of 20 April 2017 and its related technical regulation



RTCR 481:2015 require labelling for hazardous chemicals in accordance with the UN GHS revision 6 for workplace and supplier chemicals, except for those addressed in article 1, item 2 (Scope), and be accompanied by a GHS-compliant safety data sheet to be registered. It provides a five-year transitional period (until 30 December 2022), allowing use of existing non-GHS-compliant labels on chemicals already registered and placed on the market during that period.

Scope: Deadline for substances: Deadline for mixtures: Substance classification list: HazCom (SDS, label): Additional information: UN GHS reference:

Not yet established Not yet established

UN GHS Revision 1 (2005) UN GHS Revision 6

Country-specific information:

http://www.pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm\_texto\_completo.aspx?para m1=NRTC&nValor1=1&nValor2=85223&nValor3=110162&strTipM=TC https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=5&cad=rja&uact=8&ve d=2ahUKEwjQypnLvo\_eAhVQwFkKHW6UBOUQFjAEegQIBBAC&url=https%3A%2F%2Fwww.une ce.org%2Ffileadmin%2FDAM%2Ftrans%2Fdoc%2F2017%2Fdgac10c4%2FUN-SCEGHS-34-INF18e.docx&usg=AOvVaw1rzrbh0\_m\_H03cb0s1zRUt

# 30. Israel

UN GHS was adopted in Israel just recently by Regulation SI 2302 part 1 and officially valid from August 2019 (will take effect 90 days from their publication in its Official Gazette). Transition period time for industry is tree years, till August 2022.

Israel adopted GHS in a similar way as the EU by referring to CLP regulation

Israel initially notified the World Trade Organization (WTO) on 28 August 2018 of two drafts for comments on the implementation of GHS via two legal instruments:

- SI 2302 Part 1 Dangerous Substances and Mixtures: Classification, Labelling, Marking and Packaging
- SI 2302 Part 2 Transportation: Classification, Labelling, Marking and Packaging

The Part 1 draft replaces an earlier draft dated 3 December 2013 which is largely based on the EU CLP Regulation 1272/2008 (CLP).

During the anticipated 3-year transition period, both the existing SI 2302 Part 1 standard (dated 2009) and the revised version of SI 2302 Part 1 will be allowed. At present there is no official timeline for when the revised SI 2302 Part 1 standard will be finalized

Country-specific information: http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c53176



# 31. Kazakhstan

Kazakhstan is member of CIS and EAEU, adopting CIS and EAEU GHS standards. See 35.

# 32. Kyrgyzstan

Kyrgyzstan is member of CIS and EAEU, adopting CIS and EAEU GHS standards. See 35.

# 33. Mauritius

Mauritius was the first country that published to adopt UN GHS on 5 November 2004; no implementation dates were released though. The legal instrument was the Dangerous Chemicals Control Act (2004, based on the first edition of GHS of 2003) and related regulations.

Scope:	-
Deadline for substances:	None
Deadline for mixtures:	None
Substance classification list:	-
HazCom (SDS, label):	UN GHS
Additional information:	-
UN GHS reference:	UN GHS first version

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25792

# 34. Moldova

Moldova is member of CIS, adopting CIS GHS standards. See 35.

# 35. Russia / EAEU

Russia is member of CIS and EAEU.

- CIS = Commonwealth of Independent States, members: Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, and Uzbekistan. (Ukraine left)
- EAEU = Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia

Updated standards for hazard classification transferred to Interstate status and corresponded to the UN GHS Revision 4 are listed below:

- GOST 32419-2013 "Classification of chemicals. General requirements"
- GOST 32423-2013 "Classification of mixtures (health hazards)"
- GOST 32424-2013 "Classification of chemicals for environmental hazards. General principles"
- GOST 32425-2013 "Classification of mixtures (environmental hazards)"



- GOST 32421-2013 Classification of chemical products, the risk of which is due to physical-chemical properties. Test methods for explosive chemical products
- GOST 31340-2013 "Labelling of chemicals. General requirements" (update from 2007)

In general, the requirements are also aligned with UN GHS Revision 4, and include several changes, both in structure and content. In particular, in the new standard (when compared to the previous document), the criteria for hazard classification are changed to match the new criteria. This includes the classes and subclasses, together with the codification of hazard statements and prevention measures (P-statements). A recommendation for only displaying six P-statements on labels to save space, etc. was also added. A process to facilitate the selection of the respective six P-statements has been developed.

Special action guide for "the prevention of danger on warning markings in accordance with GOST 31340."

Recommendations on the compilation of SDS and labelling

- R 50.1.102-2014 "Guidance on the compiling of safety data sheet in according to GOST 30333"
- R 50.1.101-2014 "Guidance on the selection of precautionary statements for the labelling in accordance with GOST 31340"

The above-mentioned mandatory CIS standard will become effective in Armenia, Belarus, Kyrgyzstan, Tajikistan and Uzbekistan in 2019.

Russia published "Decree No. 1019 of 7<sup>th</sup> October 2016", introducing the expected Technical Regulation and, hence, the enforcement of the GHS system. Consequently, in Russia itself, it is not until 1 July 2021 that chemical products placed on the market will be required to comply with the new requirements on chemical product registration, labelling, (GHS) classification and conformity assessment. However, this date may be brought forward if the missing inter-state agreements (e.g. with Kazakhstan) can established.

On 18 May 2017, the technical regulation "On Safety of Chemical Products", TR EAEU 041/2017, was officially published following the Decision of the Eurasian Commission No. 19 of 3 March 2017 ("Eurasia REACH").

TR EAEU 041/2017 contains the mandatory requirements for safety of chemical products, conformity assessment schemes, products' identification, and labelling.

This will be valid for all EAEU members.

The document should enter into force on 2 June 2021, provided that by 1 December 2018, the procedure for the formation and maintenance of the register of chemicals and mixtures of the EAEC and the notification procedure for new chemicals will be approved.

More than one hundred standards in accordance with OECD testing guidelines for hazardous chemicals (addressing physical, health and environmental hazards) have been developed in the period of 2013–2015. These standards will become mandatory only after entry into force of the Technical Regulation of Customs Union "on safety of chemical products", EAEU TR 041/2017. The Technical Regulation will define a transitional period (expected to be 18 months) for the classification and labelling of chemicals according to these new standards.

It is expected that all GHS hazard classes and categories will be implemented.

Additional standards (in accordance with OECD guidelines) on testing of hazardous chemicals due to their physical and chemical properties and of chemicals dangerous for the environment



are currently being developed. Even though currently all these standards are voluntary, their requirements are widely fulfilled by industry. SDS (also called Russian Safety Passport), includes all subsections according to the GHS, with some specific requirements (such as for example expert evaluation and registration with relevant authority [Information and Analysis Center "Safety of substances and materials"]). There are also specific provisions about combination of precautionary statements.

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25866 http://ciscenter.org/en/ (not working properly in English) http://www.eurasiancommission.org/en/Pages/default.aspx

## 36. Ukraine

No update since 2018. Ukraine used to be a member of CIS, adopting Russian GHS standards: GOST 30333-2007 (SDS) since 1 Jan 2009 [to be replaced] GOST 31340-2007 (Labelling) since 1 Jan 2009 [to be replaced] It still is in the FTA and GUAM.

On 9 December 2014, the Ukrainian Cabinet of Ministers adopted Decree No 695, setting down for the coming years the government's main priorities for developing technical regulations and related legal acts. These include harmonizing Ukraine's chemicals management framework with that of the European Union, and thus replacing those that aligned with the CIS.

Thus, in January 2015, the *Verkhovna Rada* adopted a law on bringing the Ukrainian laws in line with the EU standards in terms of technical regulations and conformity assessment. Compliance deadline = (early) 2018.

The OSCE is preparing the introduction of REACH and CLP in Ukraine.

#### 37. United Kingdom (if there is no Brexit deal)

In the hypothesis of no deal, after March 2019 the UK would establish an independent standalone chemicals regime. At the time of exit, as the UK would effectively adopt the GHS in the same way as the EU, the UK classification and labelling regime would be based on the existing EU regulatory regime, yet deviations could be possible.

The Health and Safety Executive (HSE) authority will oversee tasks currently performed by ECHA. Export and import of hazardous chemicals (if there is no Brexit deal):

Scope:	
Deadline for substances:	Not in force (30 January 2019)
Deadline for mixtures:	Not in force (30 January 2019)
Substance classification list:	
HazCom (SDS, label):	
Additional information:	
UN GHS reference:	UN GHS Revision 5
	(= CLP 2018)
	1 /

Country-specific information:



http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25876 https://www.gov.uk/government/publications/classifying-labelling-and-packaging-chemicals-iftheres-no-brexit-deal

# 38. Uzbekistan

Uzbekistan is member of CIS, adopting CIS GHS standards. See 35. Press report say Uzbekistan is preparing for EAEU accession.

# 39. Tajikistan

Tajikistan is a member of CIS, adopting CIS GHS standards. See 35.

#### 40. Turkmenistan

Turkmenistan is an associate member of CIS, adopting CIS GHS standards. See 35.



# **Voluntary GHS implementation**

# 41.Bahrain

UN GHS has not yet been implemented in Bahrain.

However, as GCC (Gulf Cooperation Council) member, the following hazard communication standards may apply in the country:

- GCC Unified Guiding Regulation for the Control of Hazardous Chemicals (2002)
- GSO 01/ISO 11014:2012 Safety data sheet for chemical products Content and order of sections (ISO 11014:2009), which has been technically revised to align it with GHS
- GSO 1810/2007 Labelling Labelling of Chemical Products (four categories: applications, identification, general conditions, support documents)

As a voluntary initiative, the Code of Practice for the Introduction of the Global Harmonized system (GHS) was published in 2017, and it was adopted by GPCA (Gulf Petrochemicals and Chemicals Association) members. The Code of Practice provides hazard communication requirements for GCC countries, which are consistent with:

- Existing GCC country SDS, Label and Hazard communication legislation and standards
- The UN Globally Harmonized System (GHS) on classification and labelling, Revision 7 (2017)
- The European Regulation (EC) No 1272/2008 CLP Regulation

The Standardization Organization (GSO) for the Gulf Cooperation Council (GCC) countries has published a first draft of a technical regulation that is based on this Code of Practice, which went through a public consultation period ended in November 2019. The Standard if approved by spring 2020, it would come into force before June. However, each of the GCC countries would then need to transpose the (voluntary) standard into their domestic legislation, which could take two to three years in addition

Other legislations of relevance to product safety in Bahrain:

- Resolution No. 4 Management of Hazardous Chemicals (2006) (SDS + label)
- Bahrain Resolution No. 7 Control of Importing and Use of Prohibited and Restricted Chemicals (2002)

# 42.Chile

Some voluntary agreements were put in place, allowing the use of GHS – but only in addition to the current system. The new (initially voluntary) GHS SDS standard (National Institute of Standards [INN] NCh 2245:2015), update released November 2015, replacing the version of 2003 (MSDS requirements) and 2013 (GHS original and Revision 4), and based on UN GHS Revision 5, became mandatory under decree 61 of 26 September 2015 (storage of chemicals). Labelling requirements are also slightly changed. For example, labels conforming to the GHS, in addition to the Chilean Official Standard NCh 2190:2003 need to be written in Spanish language from 25 September 2016.

Reglamento de classification de Sustancias Quimicas y Mezclas

• NCh382:2017: Hazardous substances classification



- NCh2190:2003: Transport of hazardous substances Risk identification, Signalling [Labelling also for GHS]
- NCh2245:2015: Safety Data Sheet Standard for chemical products [UN GHS Revision 5]

Chile published a draft Regulation in November 2017, based on the UN GHS Revision 6 (same requirements for SDS and label). A public consultation ended in January 2018. A new draft was published in October 2018. The Regulation is expected to be published between end of 2019 and 2020. It would include a transition period for the adjustment of labelling and SDSs.

Background: Chile joined the OECD in 2010 (the first South American country to do so), and GHS implementation has since been mandatory for member countries. Therefore, it has been asked by the OECD's chemistry committee to publish the regulation by the end of 2019.

Country-specific information:

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25755 and scroll down https://www.levchile.cl/Navegar?idNorma=1088802#etiquestado0

https://www.leychile.cl/Navegar?idNorma=1088802#etiquestado0 http://www.ghs-chile.cl/

## 43. Hong Kong

No update since 2018. Hong Kong has implemented UN GHS Revision 3 on a voluntary basis.

Proposed implementation was 2008, in accordance with UN recommendation (phase-in period was thought to be in line with the majority of member economies), but no details or plan was developed (e.g. compliance date). Authorities reviewed the GHS implementation plan on how to align existing regulations with GHS. UNITAR was invited in February 2010 for advice.

The Dangerous Goods laws were updated on 27 April 2012 (in L.N. 55), aligning them with the IMDG code. This effectively meant the adoption of 9 classes of GHS classification. There are no GHS labelling requirements. Hong Kong will accept any version of GHS.

Scope:	
Deadline for substances:	Not yet established
Deadline for mixtures: Substance classification list:	Not yet established
HazCom (SDS, label):	Label elements will be in line with existing statutory requirements
	Must be in English or Traditional Chinese language
Additional information:	Physical and health hazard building blocks relevant to existing legislation will be adopted
UN GHS reference:	UN GHS Revision 3 (voluntary)



# 44. Kuwait

UN GHS has not yet been implemented in Kuwait's national legislations.

However, as GCC (Gulf Cooperation Council) member, the following hazard communication standards may apply in the country:

- GCC Unified Guiding Regulation for the Control of Hazardous Chemicals (2002)
- GSO 01/ISO 11014:2012 Safety data sheet for chemical products Content and order of sections (ISO 11014:2009), which has been technically revised to align it with GHS
- GSO 1810/2007 Labelling Labelling of Chemical Products (four categories: applications, identification, general conditions, support documents)

As a voluntary initiative, the Code of Practice for the Introduction of the Global Harmonized system (GHS) was published in 2017, and it was adopted by GPCA (Gulf Petrochemicals and Chemicals Association) members. The Code of Practice provides hazard communication requirements for GCC countries, which are consistent with:

- Existing GCC country SDS, Label and Hazard communication legislation and standards
- The UN Globally Harmonized System (GHS) on classification and labelling, Revision 7 (2017)
- The European Regulation (EC) No 1272/2008 CLP Regulation

The Standardization Organization (GSO) for the Gulf Cooperation Council (GCC) countries has published a first draft of a technical regulation that is based on this Code of Practice, which went through a public consultation period ended in November 2019. The Standard if approved by spring 2020, it would come into force before June. However, each of the GCC countries would then need to transpose the (voluntary) standard into their domestic legislation, which could take two to three years in addition

Other legislations of relevance to product safety in Kuwait:

- Decision No. 210 of 2001; The Executive Law of Environment Public Authority
- Law No. 42 of 2014 Promulgating the Environment Protection Law
- By-Law of the Environmental Law No. 21 of 1995 as amended by Law No. 16 of 1996 and its implementing regulations

#### 45. Myanmar

No update since 2018. Myanmar has not implemented UN GHS yet, although the intention was communicated in 2009. Available information is very sparsely but use of GHS is allowed on a voluntary basis (Regulation JIS Z7252:2014 on classification). A regulation published in October 2018 with effective date on April 2019 imposes to use local language in the Labelling Requirements.

Country-specific information: http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25802

#### 46.Oman

UN GHS has not yet been implemented in Oman.



However, as GCC (Gulf Cooperation Council) member, the following hazard communication standards may apply in the country:

- GCC Unified Guiding Regulation for the Control of Hazardous Chemicals (2002)
- GSO 01/ISO 11014:2012 Safety data sheet for chemical products Content and order of sections (ISO 11014:2009), which has been technically revised to align it with GHS
- GSO 1810/2007 Labelling Labelling of Chemical Products (four categories: applications, identification, general conditions, support documents)

As a voluntary initiative, the Code of Practice for the Introduction of the Global Harmonized system (GHS) was published in 2017, and it was adopted by GPCA (Gulf Petrochemicals and Chemicals Association) members. The Code of Practice provides hazard communication requirements for GCC countries, which are consistent with:

- Existing GCC country SDS, Label and Hazard communication legislation and standards
- The UN Globally Harmonized System (GHS) on classification and labelling, Revision 7 (2017)
- The European Regulation (EC) No 1272/2008 CLP Regulation

The Standardization Organization (GSO) for the Gulf Cooperation Council (GCC) countries has published a first draft of a technical regulation that is based on this Code of Practice, which went through a public consultation period ended in November 2019. The Standard if approved by spring 2020, it would come into force before June. However, each of the GCC countries would then need to transpose the (voluntary) standard into their domestic legislation, which could take two to three years in addition

Other legislations of relevance to product safety in Oman:

- Royal Decree No. 46/95
- Ministerial Decision No. 317/2001 (Based on Royal Decree No. 46/95) provides labelling instructions and requirements for containers
- Ministerial Decision No. 248/97 (Based on Royal Decree No. 46/95) provides classification corresponding to the UN transportation system and it provides the guidelines for the Omani Chemical Safety Sheet

# 47.Qatar

UN GHS has not yet been implemented in Qatar's national legislations.

However, as GCC (Gulf Cooperation Council) member, the following hazard communication standards may apply in the country:

- GCC Unified Guiding Regulation for the Control of Hazardous Chemicals (2002)
- GSO 01/ISO 11014:2012 Safety data sheet for chemical products Content and order of sections (ISO 11014:2009), which has been technically revised to align it with GHS
- GSO 1810/2007 Labelling Labelling of Chemical Products (four categories: applications, identification, general conditions, support documents)

As a voluntary initiative, the Code of Practice for the Introduction of the Global Harmonized system (GHS) was published in 2017 and it was adopted by GPCA (Gulf Petrochemicals and Chemicals Association) members. The Code of Practice provides hazard communication requirements for GCC countries, which are consistent with:

- Existing GCC country SDS, Label and Hazard communication legislation and standards
- The UN Globally Harmonized System (GHS) on classification and labelling, Revision 7 (2017)



- The European Regulation (EC) No 1272/2008 – CLP Regulation

The Standardization Organization (GSO) for the Gulf Cooperation Council (GCC) countries has published a first draft of a technical regulation that is based on this Code of Practice, which went through a public consultation period ended in November 2019. The Standard if approved by spring 2020, it would come into force before June. However, each of the GCC countries would then need to transpose the (voluntary) standard into their domestic legislation, which could take two to three years in addition

Other legislations of relevance to product safety in Qatar:

- Decree No. 30 of 2002 Promulgating the Environment Protection Law
- Decree No. 11 of 2000 Establishing the Supreme Environment Commission (SEC)

#### 48. Saudi Arabia

UN GHS has not yet been implemented in Saudi Arabia's national legislations. However, as GCC (Gulf Cooperation Council) member, the following hazard communication standards may apply in the country:

- GCC Unified Guiding Regulation for the Control of Hazardous Chemicals (2002)
- GSO 01/ISO 11014:2012 Safety data sheet for chemical products Content and order of sections (ISO 11014:2009), which has been technically revised to align it with GHS
- GSO 1810/2007 Labelling Labelling of Chemical Products (four categories: applications, identification, general conditions, support documents)

As a voluntary initiative, the Code of Practice for the Introduction of the Global Harmonized system (GHS) was published in 2017, and it was adopted by GPCA (Gulf Petrochemicals and Chemicals Association) members. The Code of Practice provides hazard communication requirements for GCC countries, which are consistent with:

- Existing GCC country SDS, Label and Hazard communication legislation and standards
- The UN Globally Harmonized System (GHS) on classification and labelling, Revision 7 (2017)
- The European Regulation (EC) No 1272/2008 CLP Regulation

Other legislations of relevance to product safety in Saudi Arabia:

- Royal Commission Environmental Regulations 2015 Volume 1 (Limited to the industrial areas of Yanbu and Jubail)
- Royal Decree M/34 Concerning General Environmental Law and Rule for Implementation (15 October 2001)
- Royal Decree No. M/38, 12 June 2006, Law of Chemicals Import and Management



# 49. South Africa

South Africa implemented UN GHS in 2016 (initially Revision 1, present Revision 4) on a voluntary basis.

The original voluntary South African Standard SANS 10234:2008 was based on UN GHS Revision 1 (2005). Then, South Africa announced to the UN SCE GHS their intention to publish a national regulation in 2014, which was to implement UN GHS Revision 4 (2011). The SDS standard is based on ISO 11014 and incorporated in SANS 11014:2010.

The national standard needs to be incorporated in Occupational Health and Safety Act (OHS) through amendments, giving the Ministry of Labour enforcing power (the standard is currently voluntary). The current standard will be updated as well and be mandatory then.

Supplement to SANS 10234:2008 "List of classification and labelling of chemicals in accordance with the Globally Harmonized System (GHS)" – list with reclassified substances – was published December 2008, and it is an advisory list (based on CLP Annex VI).

The Department of Environmental Affairs is using GHS to classify waste.

South Africa has taken a major step towards implementing "as soon as reasonably practicable" the UN Globally Harmonised System (GHS) for classification and labelling of chemicals. The draft Regulations for Hazardous Chemical Agents (South Africa Government Gazette No. 41904 Notice 950 of 14 September 2018) will align the country's chemical regime with GHS Revision 6.

The South African Department of Labour aims to achieve implementation by 2020 in accordance with the agreement of the member states of *the Southern African Development Community* (SADC). They are expected to be in place between early and mid-2020 (SADC pledge), will be mandatory and enforced for all hazardous chemicals used in, or in transit to, all workplaces.

The regional legislation implementation of GHS in member countries of the SADC is being discussed and ongoing (see list below). It will be based on UN GHS and South African standard SANS 10234 (based on UN GHS edition 1). All member states of the SADC are now required to publish national standards based on the regional approach.

Country-specific information: http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25871\_

# **50. United Arabic Emirates**

UN GHS has not yet been implemented in the Emirates.

However, as GCC (Gulf Cooperation Council) member, the following hazard communication standards may apply in the country:

- GCC Unified Guiding Regulation for the Control of Hazardous Chemicals (2002)
- GSO 01/ISO 11014:2012 Safety data sheet for chemical products Content and order of sections (ISO 11014:2009), which has been technically revised to align it with GHS
- GSO 1810/2007 Labelling Labelling of Chemical Products (four categories: applications, identification, general conditions, support documents)



As a voluntary initiative, the Code of Practice for the Introduction of the Global Harmonized system (GHS) was published in 2017, and it was adopted by GPCA (Gulf Petrochemicals and Chemicals Association) members. The Code of Practices provides hazard communication requirements for GCC countries, which are consistent with:

- Existing GCC country SDS, Label and Hazard communication legislation and standards
- The UN Globally Harmonized System (GHS) on classification and labelling, Revision 7 (2017)
- The European Regulation (EC) No 1272/2008 CLP Regulation

Other legislations of relevance to product safety, in United Arabs Emirates:

- Code of Practice AD EHSMS CoP 1.0 Hazardous Materials Version 3.1 June 2018 classification should be done according to international model regulations (e.g. GHS)
- Technical Guidance Document for Storage of Hazardous Materials (EAD-EQ-PCE-TG-16)
- Standard Operating Procedure for Permitting of Traders of Hazardous Materials (EAD-EQ-PCE-SOP-07)



# SADC: intention to implement GHS latest by 2020

Additionally, the **Comoros, Eswatini** (Swaziland), **Lesotho** and the **Seychelles** are also members of the SADC.

## 51. Angola

No update since 2018. Angola, as a member of the *Southern African Development Community* (SADC), agreed with SADC's intention to implement GHS latest by 2020, as communicated to UN SCE GHS in 2013.

#### 52. Botswana

No update since 2018. Botswana, although a member of the *Southern African Development Community* (SADC), was working on an implementation of GHS already for 2017.

## 53.Congo (DR)

No update since 2018. DR Congo, as a member of the *Southern African Development Community* (SADC), agreed with SADC's intention to implement UN GHS latest by 2020 as communicated to UN SCE GHS in 2013.

A GHS Planning and Inception Workshop was held on January 2014. Development of a National GHS implementation strategy is ongoing.

Country-specific information: <u>http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c41818</u>

#### 54. Madagascar

No update since 2018. Madagascar has not implemented GHS yet. As its membership in the SADC was suspended between 2009 and 2014, it is not clear whether it will implement the SADC pledge.

The Ministry of Environment, Water and Forests made presentations on GHS during workshops on chemical conventions and the IFCS held in Madagascar in 2004. Available information is very sparse.

Country-specific information: http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25790



## 55. Malawi

No update since 2018. Malawi, as a member of the *Southern African Development Community* (SADC), agreed with SADC's intention to implement GHS latest by 2020 as communicated to UN SCE GHS in 2013.

#### 56. Mozambique

No update since 2018. Mozambique, as a member of the *Southern African Development Community* (SADC), agreed with SADC's intention to implement GHS latest by 2020 as communicated to UN SCE GHS in 2013.

#### 57. Namibia

No update since 2018. Namibia, as a member of the *Southern African Development Community* (SADC), agreed with SADC's intention to implement GHS latest by 2020 as communicated to UN SCE GHS in 2013.

#### 58. Tanzania

No update since 2018. Tanzania, as a member of the *Southern African Development Community* (SADC), agreed with SADC's intention to implement UN GHS latest by 2020, as communicated to UN SCE GHS in 2013.

#### 59.Zambia

No update since 2018. Zambia, as a member of the *Southern African Development Community* (SADC), has signed the SADC regional policy on GHS.

Zambia is working on an implementation of UN GHS Revision 3 until 2017, as communicated to the UN SCE GHS. Several activities related to the GHS have been completed, e.g. the updating of national standards on the GHS to reflect the provisions of the UN GHS Revision 4 - it has been reported that the proposals are being updated to the UN GHS Revision 5 -, situation and gap analysis, and the development of a road map for GHS implementation). Although the road map does not define specific dates, it is expected that implementation for substances will last 3 years, and that implementation for mixtures will follow. Deadline for substances and mixtures have not yet been established.

#### 60.Zimbabwe

No update since 2018. Zimbabwe, as a member of the *Southern African Development Community* (SADC), agreed with SADC's intention to implement UN GHS latest by 2020, as communicated to UN SCE GHS in 2013.



# GHS not implemented, but accepted

As mentioned, the Gulf countries could be moving towards a voluntary GHS Revision 5.

## 61.Guatemala

No update since 2018. Guatemala is still working on an implementation. Nevertheless, UN GHS will be accepted.

Transitional periods are foreseen.

Guatemala is starting the process of implementing the GHS as one of the tools included in the Strategic Approach to International Chemicals Management (SAICM) plan of implementation for the development of a rationalized approach for chemicals management. A project for the implementation of GHS financed by the Quick Start Programme of SAICM was initiated in 2013. A Planning and Inception Workshop was held on 19–23 February 2014.

Country-specific information: <u>http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c41816</u>



# **Emerging GHS adoptions/implementations**

# **62.APEC**

Following a 2019 survey of GHS implementations, the Asia-Pacific Economic Co-Operation (Apec, which functions as an inter-governmental forum for 21 Pacific Rim states) recommends that its member states should adopt UN GHS Revision 7 by 2021 to improve the trade in chemicals.

## 63. Bolivia

No update since 2018. A "GHS Planning and Inception Workshop" was held in La Paz on June 2014. Bolivia launched a project for its GHS implementation.

Country-specific information: http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25749

#### 64. Brunei

No update since 2018. Brunei Darussalam has not implemented UN GHS yet. It is in the process of undertaking a situation and gap analysis to review the current chemical management system as a whole.

Several challenges are needed to both chemicals management and GHS implementation. First, present regulations are confined to pesticides. Second, controls on other chemicals are based on institutional measures, where a number of various agencies deal with chemicals, but need further coordination. Third, the majority of industry is small and medium size enterprises (SMEs) which lack capacity. Fourth, labelling awareness among stakeholders and users is low.

http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25752

#### 65.Cambodia

No update since 2018. Cambodia has not implemented UN GHS Revision 4 yet; no implementation date or phase-in period have been specified.

From 2006 to 2008, Cambodia participated as a pilot country in the UNITAR/ILO Global GHS Capacity Building Programme (with MoE as lead agency). The programme was established for the development of a draft GHS legislation ("Sub-Decree") for four sectors (industrial workplace, agriculture, transport, and consumer products) and the development of a strategic plan for national GHS implementation. It also included the organization of awareness-raising activities for public interest, labour organizations, business and industry groups. The Sub-Decree No. 180 on Management of Harmonized System of Classification and Labelling of Chemicals was signed by the Prime Minister on 20 October 2009, followed by a public consultation (February 2012).



Country-specific information: <u>http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25754</u>

# 66.Chad

No update since 2018. Chad has not implemented UN GHS yet, although an edict was published in 2007.

# 67.Egypt

No update since 2018. Egypt has not implemented UN GHS yet; no implementation is currently foreseen. Law No. 4 (environment law) defines hazardous substances as substances that exhibit dangerous properties that are hazardous to human health or which adversely affect the environment. Such properties include toxicity, explosiveness, flammability, and the emission of ionizing radiation.

EHSIMS has published a Guideline on Potential Hazards providing information on the health risks posed by particularly listed substances, including the type of danger (i.e. physical, chemical, or poisonous), and the effects of the substances on health. The guideline focuses on 200 hazardous substances.

It also provides a sample of ten substances with their individual classification and categorization. Each substance is provided with 14 statements, including the name of the substance in Arabic and English, synonyms, characteristics (e.g. melting point, boiling point), and safety and hazard statements. The safety and hazard statements appear to be in line with the EU risk and safety phrases.

The Executive Regulation (Decree No. 338) sets out the general requirements for the packaging and labelling of hazardous substances. The Regulation requires all information on the label to be in Arabic. The label must be prominently displayed on the container and must be accompanied by diagrams indicating the method of opening, emptying, storing and disposing of the container, as well as the international symbols for danger and toxicity. The label and the hazard symbol of hazardous substances appear to follow the international UN symbols (with an Arabic word below the pictogram). Nonetheless, neither the legislation nor the guideline stipulates the size and format requirements of the label itself.

Based on current regulations, no formal requirement appears to be in place for safety data sheets, although the application process for obtaining a permit for handling hazardous substances, as described in EHSIMS, states that an SDS must be submitted along with the other required documentation. Although EHSIMS provides the details of the application process for each of the six competent ministries, no specific information is given on how to prepare the SDS itself.

Country-specific information: http://extwprlegs1.fao.org/docs/pdf/egy4984E.pdf



# 68.Gambia

No update since 2018. During 2005–2007, Gambia participated as a pilot country in the UNITAR/ILO Global GHS Capacity Building Programme with the National Environment Agency serving as the coordinating organization at national level.

A proposal for follow-up on GHS implementation activities was accepted for funding through the SAICM Quick Start Programme Trust Fund. UNITAR will continue to work with Gambia in the next phase of GHS Capacity Building activities that will focus on legal implementation and development of enforcement mechanisms.

Country-specific information: <u>http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25771</u>

#### **69. Honduras**

No update since 2018. Honduras reported to have introduced GHS in June 2013, under "Regulation for Environmentally Rational Chemical Management" (Articles 152–163), but without implementation deadlines. Available information is very sparsely.

## 70.India

Publication of India's first National Chemicals Policy, the scope of which is expected to include GHS, is still awaited. The process for the proposed pre-registration of chemical substances includes classifying them according to GHS, and this is likely to be in line with EU CLP, rather than all building blocks of the UN 'Purple Book'.

#### 71.Iran

Press reports say that Iran will join a free trade zone with the EAEU. It is not clear whether this means Iran will also take over the EAEU GHS standard.

#### 72.Kenya

No update since 2018. The National Environment Management Authority of Kenya has finalized the development of the Environment Management and Coordination (Toxic and Hazardous Industrial Chemicals and Materials Management) Regulations 2018. The regulations are meant to provide for the sustainable management of chemicals in Kenya. The draft regulation was sent for comments end of 2018 and at the moment discussions are taking place between the different stakeholders.

The development of these draft regulations follows a series of conversations around management of chemicals locally in Kenya, which was sparked mainly after the government ban on plastic bags (shopping bags and flat bags) in 2017, and then followed by the development of draft Plastic Bags Control and Management Regulations in 2018.



# 73. Laos

Lao People's Democratic Republic (PDR), or Laos, is in the process of preparing the draft of Laos GHS regulation (UN GHS Revision 6) with expected timeframe to be finalize and approved by end of 2018 or during the year 2019. Laos is also considering to adopt UN GHS Revision 7 based on the ASEAN Regulatory Cooperation Project (ARCP) "ASEAN 7 proposal".

The Law on the Chemicals Management is defined that SDS need to provide 16 sections. The Department of Industry and Handicraft, Ministry of Industry and Commerce is the main agency to implement GHS. They are drafting a guideline on labeling which will define the font size and labeling requirements in the country.

UNITAR supports national GHS implementation, including awareness raising activities. The country has begun to draft a project proposal and has set up a national steering committee. Planning for the implementation of GHS is 2019. Deadline for substances and mixtures have not yet been established.

Country-specific information: <u>http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25785</u>

## 74. Nigeria

No update since 2018. Nigeria has not implemented GHS yet. Available information is very sparse.

Country-specific information: http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25857

## 75. Pakistan

Pakistan's Ministry of Climate Change (MoCC) is planning the adoption of the GHS within the greater frame of an overarching chemicals act by 2021.

The Environmental Protection Agency has published the draft "Handling, Manufacture, Storage, Import of Hazardous Waste and Hazardous Substances Rules 2016", which requires hazardous substances imported into Pakistan to have labels based on the UN GHS Revision 6. The Rules also include workplace requirements for premises where the hazardous substances are manufactured and used. It is unclear when the draft Rules will be finalized and/or will take effect.

# 76.Peru

No update since 2018. Peru is working on an implementation of the UN GHS; however, no GHS implementation details or plan has been developed.

Country-specific information:



http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25860

# 77.Senegal

No update since 2018. Senegal has not implemented GHS yet. Available information is very sparse. During 2005–2007, Senegal participated as a pilot country in the UNITAR/ILO Global GHS Capacity Building Programme.

In 2007, a GHS-implementing regulation (standards and *"arrêté interministériel"*) was drafted. The draft text (which addresses the needs of four different sectors: agriculture, transport, industry and consumer goods), as amended (if necessary) by the relevant stakeholders, was expected to be presented for signature to the Ministers of Environment and Industry. Available information is very sparse.

Country-specific information: http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25867

#### 78. Sierra Leone

As part of a wider 'overarching chemical regulatory framework', Sierra Leone plans to implement GHS by 2023.

## 79. Venezuela

No update since 2018. Venezuela has not implemented GHS yet. Work is in progress since 2009. Available information is very sparse.

Country-specific information: http://www.unece.org/trans/danger/publi/ghs/implementation\_e.html#c25880



# "Unknown unknowns"

Afghanistan Algeria Andorra Antigua Bahamas Bangladesh Barbados Belize Benin Bhutan Bosnia Herzegovina Burkina Burundi Cameroon Cape Verde Central African Republic Congo (Republic) Cuba Djibouti Dominica Dominican Republic East Timor El Salvador Equatorial Guinea Eritrea Ethiopia Fiji Gabon Georgia (GUAM) Ghana Grenada Guinea Guinea-Bissau Guyana Haiti Iraq Ivory Coast Jamaica Jordan Kiribati Kosovo Lebanon Liberia Libya Maldives Mali Marshall Islands



Mauritania Micronesia Monaco Mongolia Montenegro: GHS Revision 5 Morocco Nauru Nepal Nicaragua Niger North Korea North Macedonia Palau Panama Papua New Guinea Paraguay Rwanda St Kitts & Nevis St Lucia Saint Vincent & the Grenadines Samoa San Marino Sao Tome & Principe Solomon Islands Somalia South Sudan Sri Lanka Sudan Suriname Syria Togo Tonga Trinidad & Tobago Tunisia Tuvalu Uganda Vanuatu Vatican City Yemen



# ANNEX

# Of those countries who have implemented GHS, it is Revision

Original	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>
Costa Rica, Ecuador, Mauritius, Zambia				
	Australia, Hong Kong, Malaysia, Thailand, USA			
		Brazil, China, Indonesia, Russia /EAEU, Serbia, Singapore, South Africa, South Korea, Taiwan, Turkey [CLP], Uruguay, Vietnam		
			Argentina, Canada, Chile, EU/EEA [CLP], Montenegro, Mexico, New Zealand, Philippines, UK, Switzerland [CLP]	
				Colombia, Japan, Laos