

Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

**Sub-Committee of Experts on the Globally Harmonized
System of Classification and Labelling of Chemicals**

2 December 2022

Forty-third session

Geneva, 7-9 December 2022

Item 4 (a) of the provisional agenda

**Implementation: Possible development
of a list of chemicals in accordance
with the Globally Harmonized System**

Preliminary analysis of global chemical classification list survey for competent authorities update

Transmitted by the experts from the United States of America and Canada on behalf of the informal correspondence group

1. The global list informal correspondence group (ICG) conducted the “United Nations GHS Global Classification List Survey”, administered by the Co-chairs of the ICG, the United States of America and Canada, with the assistance of the U.S.’s consultant, in October/November 2021 (INF.13 to the forty-first session).

2. At the forty-second session of the Sub-Committee the global list informal correspondence group presented a preliminary analysis of global chemical classification list survey for competent authorities (INF.20 to the forty-second session). Since that time corrections and clarifications have been identified as follows:

- (a) Guiding principle (a) Question 9: clarification the question is not applicable;
- (b) Guiding principle (a) Questions 12, 13, and 19: responses for Japan;
- (c) Guiding principle (b) Question 2: correction that this is for “Other responses” and clarification that the question is not applicable;
- (d) Guiding principle (b) Question 4: response for Japan and graph;
- (e) Guiding principle (b) Question 6: physical hazard classes/categories gray shading was applied to the entries for Australia and Vietnam to indicate the question was not applicable and a revised footnote was included for the table;
- (f) Guiding principle (b) Question 6: health hazard classes/categories response for Japan and gray shading was applied to the entries for Australia and Vietnam to indicate the question was not applicable;
- (g) Guiding principle (b) Question 6: environmental hazard classes/categories response for Japan and Malaysia;
- (h) Guiding principle (b) Question 6: the removal of N/A for environmental hazard classes/categories that were adopted to align with the presentation for health hazard classes/categories and physical hazard classes/categories;
- (i) Guiding principle (b) Question 10: response for Japan;

- (j) Guiding principle (c) Question 5: clarification the question is not applicable;
- (k) Guiding principle (c) Question 8: response for Japan and graph;
- (l) Guiding principle (c) Question 12: response for Japan;

3. This informal document presents the updated analysis in the Annex to this document.

4. The updated spreadsheet with the raw survey results is enclosed as an addendum to this informal document and circulated as INF.27/Add.1 (Excel file).

5. A brief background on the survey can be found in the annex to this document while a detailed background on the survey can be found in informal document INF.30 (forty-third session).

6. We now consider the competent authorities preliminary analysis as complete and do not intend to make further updates or add new information unless a critical need is identified.

Annex

Preliminary analysis of global chemical classification list survey for competent authorities

The global list informal correspondence group conducted a GHS Global Classification List Survey of international classification lists that follow the GHS in October/November 2021. The purpose of the survey was to understand how the lists were developed, how they are implemented, and how they compare to the “guiding principles.” The guiding principles are six principles developed by the Sub-Committee related to the possible development of a global list of chemicals classified in accordance with the GHS. See ST/SG/AC.10/C.4/48, Annex III, p. 18 for the guiding principles.

Sixteen responsible authorities, including competent authorities (10), UN bodies and UN specialized agencies (3), and non-governmental organizations (3), responded to the survey. The information provided here is an overview and analysis of the responses received by competent authorities related to their chemical lists.

The competent authorities that responded to the survey are:

- Australia
- Canada
- China
- European Union (EU)
- Japan
- Malaysia
- New Zealand
- Republic of Korea
- United Kingdom of Great Britain and Northern Ireland (UK or United Kingdom)
- Vietnam

A number of general and/or background questions were asked, as well as questions related to each of the six guiding principles (Guiding Principles (a) – (f)). The competent authorities’ responses to these questions, as well as any additional narrative responses, are provided below. Table cells that have been grayed out indicate the question was not applicable while an entry of N/A indicates that no response was received. The respondents’ contact information and other private information have been omitted. Answers are reflective of the list at the time the survey was completed.

General background questions*What is the GHS implementation status? (Select all that apply)*

	Australia	Canada	China	EU	Japan	Malaysia	New Zealand	Republic of Korea	UK	Vietnam
GHS is legally implemented in one or more possible sectors (that is, the GHS has been adopted through a legally binding instrument, such as a law, decree, regulation, mandatory standard, etc. and the instrument is in force.)										
GHS is implemented on a voluntary basis in one or more possible sectors (that is, the GHS has been incorporated into a non-mandatory instrument, such as voluntary standards, recommendations, guidance, etc. and/or is voluntary.)										
GHS implementation is in transition* to legal implementation (*this excludes transition to a more recent version of the GHS)										

If necessary, please provide a brief explanation of your response in the space below.

Australia - GHS has been implemented through the model Work Health and Safety (WHS) laws for the classification and labelling of chemicals used in the workplace, with respect to physical and health hazards. For further information on the model WHS laws, see <https://www.safeworkaustralia.gov.au/law-and-regulation>.

Classification and labelling of chemicals for environmental hazards in accordance with the GHS is currently not required in Australia. Separate labelling requirements apply for consumer products, and some exemptions to the GHS requirements apply for agricultural and veterinary chemicals.

EU - In the European Union the GHS is implemented through 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 (also known as the CLP Regulation)

Malaysia - Globally Harmonised System is embedded in local legislation by the name of Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 (CLASS 2013). However, CLASS is only applicable to hazardous chemicals supplied at the workplace under GHS scope. CLASS only covers industrial sector. The other three sectors are under the jurisdiction of different government agency and have not implement GHS yet.

New Zealand - GHS is implemented by the EPA's Hazardous Substances (Hazard Classification) Notice 2020, which is a legal instrument made under the Hazardous Substances and New Organisms Act 1996.

If the GHS has been implemented, what sectors has the GHS been implemented for? If the GHS implementation is in transition, what sectors will the GHS be implemented for?

Australia	Canada	China	EU	Japan	Malaysia	New Zealand	Republic of Korea	UK	Vietnam
		Emergency Response	Consumer Emergency Response Environment Pesticides	Environment		Consumer Emergency Response Environment Pesticides Pharmaceuticals - human Pharmaceuticals - veterinary (animal)	Consumer Environment Pesticides	Consumer Emergency Response Environment Pesticides Production Storage Transport	Consumer Emergency Response Pesticides Pharmaceuticals - human Pharmaceuticals - veterinary (animal) Production Storage Transport
Storage		Storage	Storage		Storage	Storage		Storage	Storage
Workplace	Workplace	Workplace	Workplace	Workplace	Workplace	Workplace Other	Workplace	Workplace	Workplace

'Other' Responses:

New Zealand - For human pharmaceuticals, only for ingredients and bulk quantities, but not for finished human dose form.

If the GHS has been implemented, which version of the GHS is currently implemented? If the GHS implementation is in transition, which version of the GHS is planned to be implemented?*

Australia	Canada	China	EU	Japan	Malaysia	New Zealand	Republic of Korea	UK	Vietnam
GHS Rev. 3	GHS Rev. 3	GHS Rev. 4	GHS Rev. 7	GHS Rev. 6	GHS Rev. 3	GHS Rev. 1	GHS Rev. 6	GHS Rev. 7	GHS Rev. 3
GHS Rev. 7	GHS Rev. 5					GHS Rev. 7			GHS Rev. 4 GHS Rev. 5

**this excludes transition to a more recent version of the GHS*

Please provide a brief explanation if more than one version was selected

Australia	Currently transitioning from GHS Rev. 3 to Rev 7.
Canada	The Canadian Hazardous Products Regulations are aligned with the 5th revised edition of the GHS, except for the Flammable Gases hazard class and Aerosols hazard class, which are aligned with the 3rd revised edition of the GHS. Canada is proposing to align with the 7th revised edition of the GHS.
China	
European Union	
Japan	
Malaysia	
New Zealand	The classification system under the Hazardous Substances and New Organisms Act was originally based (in 2001 regulations) on a pre-published version of the 1st Edition. In April 2021, the hazard classification system was updated to GHS Rev. 7, however, there is a transitional period that runs for 4 years until 30 April 2025.
Republic of Korea	
United Kingdom	
Vietnam	The UNECE publishes information about the status of implementation of GHS by country.

Does this country or organization have a classification list?

Australia	Canada	China	EU	Japan	Malaysia	New Zealand	Republic of Korea	UK	Vietnam
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Does this list align with the GHS or the jurisdiction's implementation (past or present) of the GHS?

Australia	Canada	China	EU	Japan	Malaysia	New Zealand	Republic of Korea	UK	Vietnam
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

What authority or organization is responsible for this list (for example, administration of this list, making this list available)?

Australia	The list is published in the Hazardous Chemical Information System (HCIS). Decisions about the direction of HCIS, such as the decision to transition to GHS Rev. 7, are made by Safe Work Australia Members. The Safe Work Australia agency is responsible for making HCIS available and updating data. Further information about the Safe Work Australia Members and the agency is available from https://www.safeworkaustralia.gov.au/about-us/who-we-are-and-what-we-do
Canada	Health Canada
China	the Ministry of Emergency Management (MEM) of the People's Republic of China
European Union	The European Commission makes this list available via Annex VI to the CLP Regulation. It is also available the (searchable) classification and labelling inventory which is administered by the European Chemicals Agency
Japan	Interministerial committee on the GHS
Malaysia	Department of Occupational Safety and Health, Ministry of Human Resource
New Zealand	Environmental Protection Authority (NZ)
Republic of Korea	N/A
United Kingdom	The Health and Safety Executive (HSE) acting as the GB CLP Agency
Vietnam	N/A

Who has performed the classifications (for example, technical experts internal to the authority or organization responsible for this list, a third-party contracted company)?

Australia	Technical experts external to the authority or organization responsible for this list
Canada	Technical experts internal to the authority or organization responsible for this list
China	Technical experts internal to the authority or organization responsible for this list
European Union	Other: The Committee for Risk Assessment (RAC) of the European Chemicals Agency adopts opinions on classification proposals submitted by member states of the EU or (within some constraints) by Industry. Additional information: A large proportion of the substances currently in Annex VI were classified under the Dangerous Substance Directive (DSD) (67/548), which preceded the CLP Regulation. The criteria between DSD and CLP (GHS) are generally comparable, but also differ in some aspects. The datasets on which the DSD classification were based are not publicly available and the process was different to the current process. Any references to process in the survey address the RAC process.
Japan	Technical experts external to the authority or organization responsible for this list
Malaysia	Technical experts internal to the authority or organization responsible for this list
New Zealand	Technical experts internal to the authority or organization responsible for this list
Republic of Korea	Technical experts internal to the authority or organization responsible for this list
United Kingdom	Other: All EU harmonised classification and labelling (CLH) entries in Table 3 of Part 3 of Annex VI of Regulation (EC) No. 1272/2008 which were in force on 31 December 2020 at the end of the transition period after EU Exit, continue to be recognised by the Great Britain mandatory classification and labelling system and are included in the GB MCL List. GB MCL proposals for inclusion in the GB MCL List may be prepared by: <ul style="list-style-type: none"> • Technical experts (regulatory scientists) internal to the authority or organization responsible for this list (HSE acting as the GB CLP Agency); or • Technical experts external to the authority or organization responsible for this list employed by the Secretary of State, and Scottish and Welsh ministers who are appointed GB CLP • Regulation competent authorities and who can propose new or revised GB MCLs under the retained GB CLP Regulation; or • Technical experts external to the authority or organization responsible for this list employed by manufacturers, importers, downstream users of substances as duty holders under the retained GB CLP Regulation
Vietnam	Technical experts internal to the authority or organization responsible for this list

Please provide the name of the authority, organization, or company responsible for this list.

[This question was intended to be presented with the option:

"Technical experts external to the authority or organization responsible for this list" as "Please provide name of the authority, organization or company" to capture the external experts who performed the classifications]

Australia	Australian Industrial Chemicals Introduction Scheme (AICIS) and European Chemical Agency
Canada	
China	
European Union	
Japan	The GHS classification Committee
Malaysia	
New Zealand	
Republic of Korea	
United Kingdom	
Vietnam	

Provide a brief summary of the classification process, as relevant.

Australia	Hazard classification processes are up to the relevant sources of classification information, i.e. the AICIS and the ECHA. Safe Work Australia updates HCIS when classification information is amended or updated by AICIS and/or ECHA.
Canada	Substances are identified for classification assessments based on compliance and enforcement activities as well as industry submissions to Health Canada for exemption from disclosing confidential business information on an SDS or label. A literature search is conducted to identify publicly available studies and scientific literature for each substance. Scientific evaluators at Health Canada review the publicly available studies and scientific literature and classify the substance in accordance with the criteria of the Hazardous Products Regulations (the Canadian regulations which have incorporated the GHS). Classifications are peer reviewed by other internal evaluation experts.
China	N/A
European Union	Member state/ Industry dossier submitter submits a proposal to ECHA. After public consultation of the proposal, RAC adopts an opinion on the proposal and the European Commission makes the decision based on the opinion whether or not to include the classification in the list in Annex VI to the CLP Regulation
Japan	Ministries concerned nominate substances to be classified, then the classification committee consider classification according to the GHS.
Malaysia	a) List all common chemicals, acid, bases. b) Benchmark with classification of other countries e.g. Japan and ECHA. c) Verify selected classification in a technical committee. 4) Seek approval from top management.
New Zealand	Most of the chemical information for classified substances in CCID was gathered from public databases online during the transfer of our then existing chemicals into the Hazardous Substances and New Organisms Act (HSNO Act) in the years 2003 – 2006. Some data have been updated since then as part of our ongoing Reassessments programme in our Yearly Chemical Review processes, and some new substances approved under the HSNO Act since then have been added. While some of the hazard classifications were derived from comprehensive and well-referenced data (international peer reviewed sources), others were simply ‘translated’ from old EU R-phrases assignments. Therefore, there is some variability in the quality of the data presented in CCID. 5. The data was collated and reviewed by a team of scientific advisors at the EPA when it was collected and used for classification.
Republic of Korea	N/A
United Kingdom	<p>Introducing new or revising existing GB MCL comprises the following stages:</p> <ul style="list-style-type: none"> • the GB MCL proposal or published ECHA RAC Opinion; • public consultation (GB MCL proposals only); • the GB MCL Technical Report; • the GB MCL impact and policy assessment/the GB MCL Agency Opinion; • GB MCL Recommendation and Decision; • amending the GB MCL List. <p>If evidence comes to the attention of HSE that may lead to new or revised GB MCL, then HSE has the scientific and regulatory expertise to prepare a GB MCL proposal.</p> <p>HSE also monitor international forums such as the ECHA Committee for Risk Assessment (RAC) for information that may lead to proposals for new or revised GB MCL. When a RAC Opinion is published, HSE as the GB CLP Agency must reach an opinion of its own on whether to agree and align with the RAC Opinion under the Article 37 procedure in the GB CLP Regulation.</p> <p>Great Britain is free to determine its own GB MCLs where it is justified by supporting scientific data and wider policy considerations. In time, this may result in Great Britain having a different MCL to the EU CLH for the same substance.</p> <p>Drafting a proposal requires someone who is an expert, who is technically competent, and who understands what is required. They must know how to interpret the scientific data and evidence in line with the classification criteria set out in the GB CLP Regulation.</p>
Vietnam	N/A

What is the purpose of this list?

Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
		Harmonize classification	Harmonize classification		Harmonize classification	Harmonize classification	Harmonize classification	Harmonize classification	Harmonize classification
Assist stakeholders with classifications		Assist stakeholders with classifications	Assist stakeholders with classifications	Assist stakeholders with classifications	Assist stakeholders with classifications	Assist stakeholders with classifications	Assist stakeholders with classifications	Assist stakeholders with classifications	Assist stakeholders with classifications
			Verify compliance			Verify compliance	Verify compliance	Verify Compliance	Verify compliance
			Restrict substances				Restrict substances		
	Other	Other	Other		Other			Other	

'Other' responses:

Australia	
Canada	As a tool to verify compliance of SDSs and labels
China	Safety management and emergency rescue
European Union	Hazardous properties of substances are identified and labelled and their scope of use adjusted accordingly
Japan	
Malaysia	Focus on Small and Medium Enterprises (SMEs) without resources or expertise on classification.
New Zealand	
Republic of Korea	
United Kingdom	Substances on the GB MCL List may undergo other regulatory processes such as restriction (under the UK REACH Regulation) once a decision on the GB MCL has been taken and the GB MCL List updated.
Vietnam	

Is this list publicly available or restricted?

Australia	Canada	China	EU	Japan	Malaysia	New Zealand	Republic of Korea	UK	Vietnam
Publicly available	Restricted	Publicly available	Publicly available	Publicly available	Publicly available	Publicly available	Publicly available	Publicly available	Publicly available

If restricted, is there a publicly known intent for the government, a competent authority or organization to make this list publicly available?

Canada - yes

Is access to this list free of charge?

Australia	Canada	China	EU	Japan	Malaysia	New Zealand	Republic of Korea	UK	Vietnam
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

What is the web link for this list (if available)?

Australia	http://hcis.safeworkaustralia.gov.au/
Canada	Not applicable. Please note answers to the survey questions are based on the private "WHMIS Classifications" and not the public Hazardous Substance Assessments. Responses to this survey may not apply to the Hazardous Substance Assessments.
China ¹	https://www.mem.gov.cn/fw/cxfw/201804/P020190328517303531736.pdf
European Union	https://www.echa.europa.eu/documents/10162/17218/annex_vi_clp_table_atp15_en.xlsx/27c0e515-0da2-5eb0-b5ca-3ba8556f1f6a
Japan	https://www.nite.go.jp/chem/english/ghs/ghs_download.html
Malaysia ²	https://www.dosh.gov.my/index.php/list-of-documents/osh-info/chemical-management-1/3734-summary-report-hazardous-chemical-inventory-2019-from-cims/file https://www.dosh.gov.my/index.php/legislation/codes-of-practice/chemical-management/3460-industry-code-of-practice-on-chemicals-classification-and-hazard-communication-amendment-2019-part-1/file
New Zealand	https://www.epa.govt.nz/database-search/chemical-classification-and-information-database-ccid/ The database is searchable chemical by chemical. We do not have it publicly available in the form of a complete list. In answer to the previous question, we do not currently have CCID available as a download as we have moved to a new system (IUCLID). We will see if we can abstract a complete file of the information.
Republic of Korea ³	https://ncis.nier.go.kr/en/main.do
United Kingdom	The GB MCL List (.xlsx) - https://www.hse.gov.uk/chemical-classification/assets/docs/mcl-list.xlsx
Vietnam ³	https://chemicaldata.gov.vn/cms.xc

1. Web link provided by informal correspondence group (ICG) member not affiliated with the competent authority.
2. A second web link was provided by the ICG co-chairs that are not affiliated with the competent authority, supplemental to the first web link provided by the competent authority.
3. Web link provided by the ICG co-chairs that are not affiliated with the competent authority.

Language options for lists

	<i>Is the list available in English?</i>	<i>Is the list available in another language?</i>	<i>Please list other language(s)</i>
Australia	Yes	No	
Canada	Yes	No	
China	No	Yes	Chinese
European Union	Yes	Yes	The CLP Regulation, including Annex VI to this regulation is available in all languages of the EU
Japan	Yes	Yes	Japanese
Malaysia	Yes	Yes	Bahasa Malaysia (National Language of Malaysia)
New Zealand	Yes	No	
Republic of Korea	Yes	Yes	English
United Kingdom	Yes	No	
Vietnam	Yes	Yes	Arabic, Chinese, English, French, Russian, Spanish

<i>Are external classification lists considered in the process of classification?</i>			
	<i>External classification lists</i>	<i>Classification list(s) considered</i>	<i>Are there other relevant chemical classification lists to be noted for this country/jurisdiction or organization?</i>
Australia	Yes	European Chemical Agency (ECHA)	There are other chemical classification lists, but they are not related to the GHS
Canada	Yes	External GHS classifications are considered at times, including CNESST classifications (a Canadian provincial authority) and Annex VI to the CLP Regulation, but alignment would not be the actual basis for classification and we do not adopt external GHS classifications. Other classification schemes, such as IARC, NTP or ACGIH are considered as they relate to the GHS classification criteria, as per the Canadian guidance document.	Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), a provincial authority for the province of Québec has a WHMIS 2015 classification list that incorporates the criteria contained in the Hazardous Products Regulations (https://reptox.cnesst.gouv.qc.ca/en/Pages/list-whmis-2015-a.aspx)
China	Yes	EU and Japan	Don't know
European Union	No		C&L Inventory is also managed by ECHA. As well as listing the harmonised classifications (Annex VI to CLP), this searchable database contains classification and labelling information on notified and registered substances received from manufacturers and importers.
Japan	No		No
Malaysia	No		No
New Zealand	Yes	Originally classifications using the EU Risk phrase system were used. Currently, the external lists that would primarily be considered are the CLP lists from ECHA, the Hazardous Chemical Information System (HCIS) from Safework Australia and the Australian Industrial Chemicals Introduction Scheme (AICIS).	Classifications of mixtures (products) can be found in the EPA's 'Approved hazardous substances with controls' database https://www.epa.govt.nz/database-search/approved-hazardous-substances-with-controls/ An Excel spreadsheet containing GHS classification information on 9072 substances and mixtures, which was prepared for the process for updating to GHS 7, is also available, but this does not contain the underlying data.
Republic of Korea	Yes	EU CLP	Yes (no names of other lists provided).
United Kingdom	Yes	Table 3 in Part 3 of Annex VI of Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures and subsequent Adaptations to Technical Progress (Commission Delegated Regulations) published in the Official Journal of the European Union. ECHA Classification and Labelling (C&L) Inventory - C&L Inventory - ECHA (europa.eu) – public version only.	There are other chemical classification lists, but they are not related to the GHS
Vietnam	No		No

Additional Information (if applicable)

European Union - Yes, additional information was received via email correspondence to complement survey responses for a general question. The response for the general question has been updated accordingly.

Guiding principle (a): The process for developing and maintaining a global list must be clear, transparent and follow the principles of the GHS. Opportunities should be provided for stakeholders to provide input as well as mechanisms for expert review, conflict resolution and updating the list when new significant data or information become available

Question 1 - In the process leading to changes to this list (for example, adding or removing chemicals, changing classification information for a substance), is there an opportunity for stakeholders to provide input?

	Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes or No	Y	Y	Y	Y	Y	Y	Y	N	Y	Y

Question 2 - If yes, please indicate the stakeholders involved with a brief explanation of their role. For example, are the relevant stakeholders consulted on changes to this list? Do changes to this list require approval from stakeholders (for example, in a council or committee)?

Australia	<p>AICIS and ECHA are the only two stakeholders that can initiate changes to the classification information on HCIS.</p> <p>AICIS notifies Safe Work Australia of any recommended amendments to classifications for updating on HCIS.</p> <p>For ECHA, HCIS administrators at Safe Work Australia manually seek out changes to any classifications, as published in the Adaptation to Technical Progress (ATPs) to Annex VI of the CLP Regulations, and make changes accordingly to HCIS.</p>
Canada	Where classifications are shared by Health Canada with suppliers and claimants when there is a different or missing classification provided on an SDS or label, the suppliers and claimants are provided an opportunity to comment on the classifications. While the comments inform Health Canada's decision on the classification, it is ultimately Health Canada that makes the decision.
China	N/A
European Union	The primary stakeholders are the industry sector which manufactures, imports and/or places the substance on the market. Other stakeholders are NGOs and the member state competent authorities. Industry stakeholders are always informed when Consultations on substances which are within their remit are launched, but are usually also made aware of action on substances in the CLH process prior to this by other means (eg via an entry in ECHAs Registry of Intentions or by a MS Competent Authority directly.
Japan	Stakeholders can request reclassification of substances to the Ministries concerned.
Malaysia	<p>Part 1 ICOP CHC (Amendment) 2019 is based on minimum chemical classification. If the stakeholder has data or other information that lead to classification of additional hazard class or more severe category compared to minimum classification, they may classify accordingly.</p> <p>The stakeholder shall submit to Director General the relevant information and data to support the exclusion of any hazard class or classification of less severe category compared to minimum classification specified. Changes of the list has been informed to stakeholders.</p> <p>Stakeholders consultation was conducted for two months. Input from stakeholders were considered in the amendment of the list in 2019.</p>
New Zealand	Stakeholder input can occur when substances are being reassessed following the legislative provisions in the HSNO Act. This process is subject to public consultation. Stakeholders who comment are usually from industry but any of the above can input through the public consultation process. Adding new chemicals would usually occur after an approval process (according to the HSNO Act) has been conducted. This process can also be open to public consultation. Changes to the list require the approval of the EPA's governing body, or its delegate - usually Chief Executive of EPA or senior managers. External stakeholders are not involved in the final decision process.
Republic of Korea	

United Kingdom	<p>Relevant stakeholders involved:</p> <ul style="list-style-type: none"> • Relevant authorities – including other UK government departments and agencies, eg • Environment Agency, competent authorities (UK Government Ministers, Scottish and Welsh Ministers) – to consider the impact of changes to the environment; economy; businesses; trade; public health; protection of workers, consumers, more vulnerable groups; and downstream legislation; • Business/industry associations eg trade associations – to represent their members and provide information to the regulator (HSE acting as the GB CLP Agency) and to their members on the impact of changes; • Duty holders eg manufacturers, importers, downstream users, distributors, retailers – to take account of changes in classification for compliance purposes; • Non-governmental organisations representing the civil society – to raise issues and concerns about chemicals in relation to animal/human health and the environment; • Organisations representing the interest of employees potentially affected – trades unions – potential impact on worker protection; • Academia – universities, researchers – to note changes and identify areas for further research; • Other jurisdictions potentially affected – eg the EU, members of the World Trade Organisation. • <p>Changes to the GB MCL List do not require approval from stakeholders through a council or committee but the Secretary of State (UK Government) will make a decision on the GB MCL with the consent of the Devolved Administrations (Scotland and Wales - Scottish and Welsh Ministers).</p> <p>HSE conducts public consultations to gather information on:</p> <ul style="list-style-type: none"> • the scientific and technical aspects of proposed classifications; • the policy and socio-economic aspects of such a proposal. <p>HSE only conducts public consultations on GB MCL proposals for new or revised mandatory classifications.</p>
Vietnam	N/A

Question 3 - Is there an opportunity for public consultation?

	Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes or No	N	N	Y	Y	N	Y	Y		Y	Y

Question 4 - Do the classifications have a mechanism for expert review?

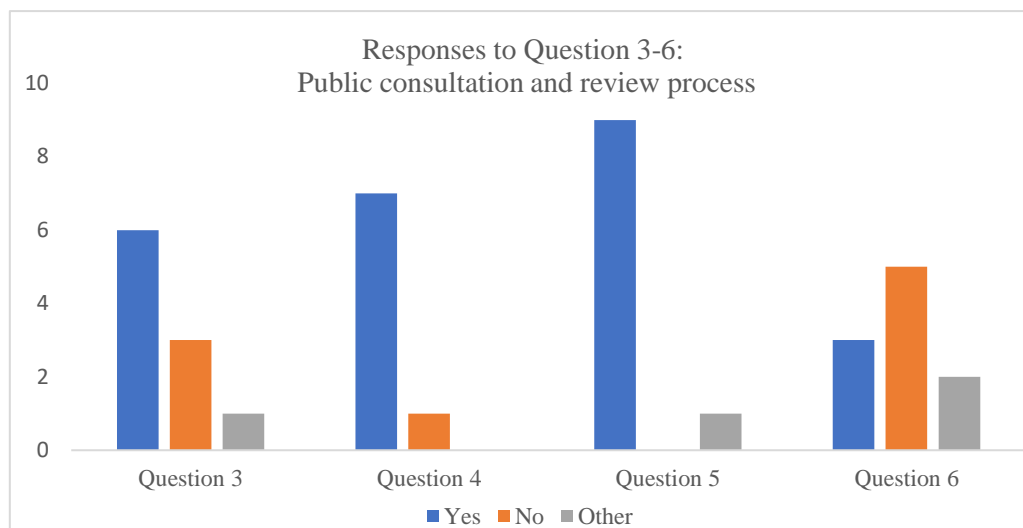
	Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes or No	N	Y	Y	Y	Y	Y	Y	Y	Y	Y

Question 5 - If yes, are the classifications subject to an internal peer review? (for example, within the competent authority or organization responsible for administering this list)

	Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes or No		Y	Y	Y	Y	Y	Y	Y	Y	Y

Question 6 - If yes, are the classifications subject to an external peer review? (for example, outside the competent authority or organization responsible for administering this list)

	Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes or No		N	N	Y	N/A	Y	N	Y	N	N



Question 7 – Does this list have a mechanism for conflict resolution?

	Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes or No	Y	Y	Y	Y	N	Y	Y	Y	N	Y

Question 8 – If yes, is this mechanism considered to be part of the process of establishing classifications on this list?

	Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes or No	N	Y	Y	Y		Y	Y	Y		Y

Question 9 – 'Other' Responses

Question not applicable

Question 10 – If yes, please provide a brief summary of this mechanism

Australia	In the event that AICIS and ECHA provide different classifications or amendments for a particular chemical, Safe Work Australia will determine the final classification to be input into HCIS.
Canada	<p>The internal technical experts performing the classifications discuss in an attempt to reach a consensus when there is a differing opinion during the review process. Where a consensus cannot be reached, a senior technical expert makes a final decision. However, we note this mechanism is limited, amongst a limited group of experts internal to the competent authority.</p> <p>Where classifications are shared by Health Canada with suppliers and claimants when there is a different or missing classification provided on an SDS or label, the suppliers and claimants are provided an opportunity to comment on the classifications. While the comments inform Health Canada's decision on the classification, it is ultimately Health Canada that makes the decision.</p> <p>A judicial review process is available to regulated parties, however it should be noted that judicial reviews are a general mechanism for requesting reviews of decisions or orders by federal boards, commissions or other tribunals in Canada, and not a mechanism specific to this list. Any party wishing to file an application for a judicial review should contact the Federal Court of Canada.</p>
China	N/A

European Union	Conflict resolution is built into the system at many levels. There is general consultation of the CLH report which contains the proposal for classification, discussion by the Committee for Risk Assessment (RAC) and its work group in which the stakeholders are invited to contribute. RAC is consensus driven, but members also have the opportunity to provide a minority opinion. The adopted classifications are discussed by the Commission with a committee comprising representatives of member states of the EU, to which industry and other stakeholders can also contribute, before the substance is included in the list (Annex VI to CLP). The stakeholders may then challenge the Annex VI entry in the European Court of Justice.
Japan	
Malaysia	Stakeholder submit to Director General relevant info and data, members of Technical Committee meet to discuss the issue raised, meeting resolution determined and notification of meeting resolution to the stakeholder
New Zealand	There is an implicit, informal mechanism. The CCID is not established by legislative provision, rather it is an operational tool. It is a public-facing part of the EPA's database of information on hazardous substances (now using IUCLID). If an external stakeholder finds a problem they can notify the EPA, who can then carry out a reassessment (usually of a group of such changes) which goes through a legislative process, involving public consultation, and with the possibility of a public hearing being held. The EPA governing body, the Authority, is effectively the arbitrator in the system that makes a final decision, and can adjudicate between the views of stakeholders and the EPA's technical staff.
Republic of Korea	N/A
United Kingdom	
Vietnam	N/A

Question 11 – Is there a mechanism for updating the classifications when new significant data or information become available?

New and significant information is any information that changes the classification of the substance or mixture and leads to a resulting change in the information provided on the label or any information concerning the chemical and appropriate control measures that may affect the SDS (GHS paragraph 1.4.7.2.1).

	Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes,	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
No										

Question 12 – If yes, is this mechanism real time updating (for example, if significant new data that would result in a classification change are identified, is the mechanism for revising the classification initiated, as opposed to waiting for the next cyclical update)?

	Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes,	No	Other	No	Other	Other	Other	Other	No	Other	Yes
No,										
Other										

Question 13 – 'Other' Responses

Australia	
Canada	Substances are identified for review based on compliance and enforcement activities and industry submissions to Health Canada for exemption from disclosing confidential business information on an SDS or label. A new literature search is conducted to identify any significant new data. If significant new data are available, the classification evaluation is updated.
China	
European Union	The mechanism is not real time, but a Member State Competent Authority will need to submit a proposal to change an entry (and therefore needs to be convinced that a change is warranted by the new information).
Japan	Although not in real time, the classification is revised as needed.
Malaysia	Affected suppliers submit new data for reclassification. The new classification only applies to the affected suppliers. Not all suppliers supplying same chemicals.
New Zealand	Changes to a number of substances are usually gathered together and then a group reassessment exercise is conducted, termed the 'Yearly Chemical Review'.
Republic of Korea	
United Kingdom	<p>GB-based manufacturers, importers and downstream users of substances have a legal duty to inform HSE (as the GB CLP Agency) and must make a GB MCL proposal when there is evidence of:</p> <ul style="list-style-type: none"> • a change in the classification of a priority hazard class: • carcinogenicity - Category 1A, 1B or 2; • germ cell mutagenicity - Category 1A, 1B or 2; • reproductive toxicity - Category 1A, 1B or 2. • respiratory sensitisation - Category 1; or • new scientific data or information that may lead to new or revised GB MCL. <p>For other hazard classes, GB-based manufacturers, importers and downstream users may submit proposals, if they have access to the scientific data and evidence.</p> <p>Under the GB CLP Regulation, the Secretary of State, and Scottish and Welsh Ministers are appointed GB CLP competent authorities and can propose new or revised GB MCL.</p> <p>If evidence comes to the attention of HSE that may lead to new or revised GB MCL, then HSE acting as the GB CLP Agency has the scientific and regulatory expertise to prepare a GB MCL proposal.</p> <p>However, the mechanism is not a real time updating mechanism as the GB MCL process can take up to three years before a new/revised GB MCL is introduced and included in the GB MCL List.</p>
Vietnam	

Question 14 – *If yes, is this mechanism cyclical in nature (for example, every two years, if relevant)?*

	Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes, No, Other	N	N	N	N	N	Other	Other	Y	Other	Y

Question 15 – 'Other' Responses

Australia	
Canada	
China	
European Union	
Japan	
Malaysia	Not applicable since classification listed are minimum classification. Suppliers just need to show proof of less stringent data than the minimum and will be given a new classification upon checking by authority through Technical Committee appointed.
New Zealand	Although entitled the 'Yearly Chemical Review' it has not always been done every year, usually due to resourcing or other priorities. However, amendments to the HSNO Act now in the NZ Parliament will introduce a new simpler, faster, mechanism for reassessments that just involve changes to a substances classification - likely in force mid-2022.
Republic of Korea	
United Kingdom	HSE acting as the GB CLP Agency will usually recommend GB MCL changes once a year based on the GB MCL Agency Opinions published that year. However, the GB CLP Regulation allows HSE to recommend changes whenever necessary if justified. This flexibility allows HSE and businesses to better manage downstream consequences and the timing of entry into force dates.
Vietnam	

Question 16 – *If yes, please state the time period for the application of this mechanism:*

Republic of Korea – N/A, Vietnam – every two years

Question 17 – *If yes, is it possible for stakeholders to initiate updates to this list?*

	Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes or No	Other	N	Y	Other	Y	Y	Other	N	Y	Y

Question 18 – 'Other' Responses

Australia	AICIS are able to request Safe Work Australia to amend chemical classifications in response to new significant data or information.
Canada	
China	
European Union	Stakeholders may only initiate updates to existing classifications in this list via a Member state Competent Authority. Under Article 37(6) of the CLP Regulation, "Manufacturers, importers and downstream users who have new information which may lead to a change of the harmonised classification and labelling elements of a substance in Part 3 of Annex VI shall submit a proposal in accordance with the second subparagraph of paragraph 2 to the competent authority in one of the Member States in which the substance is placed on the market". Where the update does not involve an existing entry in Annex VI to CLP, manufacturers, importers and downstream users may submit a proposal for classification directly.
Japan	
Malaysia	
New Zealand	By notifying the need for a change to the EPA, although the EPA then runs the reassessment process.
Republic of Korea	
United Kingdom	
Vietnam	

Question 19 – *Additional Information (if applicable):*

Japan – Corrections were received pertaining to two guiding principle (a) questions. The responses have been updated accordingly.

Guiding principle (b): All GHS hazard categories and classes must be included in the global list of classified chemicals.

Question 1 – For a country/jurisdiction, which implementation of the GHS are the classifications based on? For an organization, which version of the GHS are the classifications based on?

7										
6										
5										
4										
3										
2										
1										
Revision Number	Australia	Canada	China	EU	Japan	Malaysia	New Zealand	Republic of Korea	UK	Vietnam

Question 2 – For a country/jurisdiction, which implementation of the GHS are the classifications based on? For an organization, which version of the GHS are the classifications based on? 'Other' Responses

Question not applicable

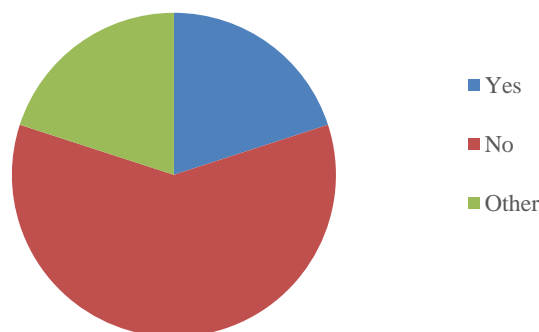
Question 3 – Please provide a brief explanation if more than one version was selected.

Australia	On 1 January 2021, Australia commenced a transition period from the GHS Rev. 3 to GHS Rev. 7. Currently, HCIS is aligned with GHS Rev. 3, as the bulk of classification data are based on GHS Rev. 3. However, HCIS has been updated to reflect the changes under GHS Rev. 7, and future classifications obtained from AICIS and ECHA will be aligned with GHS Rev. 7.
Canada	The Canadian Hazardous Products Regulations are aligned with the 5th revised edition of the GHS, except for the Flammable Gases hazard class and Aerosols hazard class, which are aligned with the 3rd revised edition of the GHS.
China	
EU	
Japan	Classifications have been done since 2007, so classifications based on many versions. Reclassifications have based on the newest version at that time.
Malaysia	
New Zealand	
Republic of Korea	
UK	
Vietnam	N/A

Question 4 – Are all hazard classes and categories from the GHS version used included for the classifications?

	Yes	No	Other
Australia	X		
Canada		X	
China		X	
EU			X
Japan		X	
Malaysia		X	
New Zealand		X	
Republic of Korea		X	
UK			X
Vietnam	X		

Inclusion of all classes/categories for classification



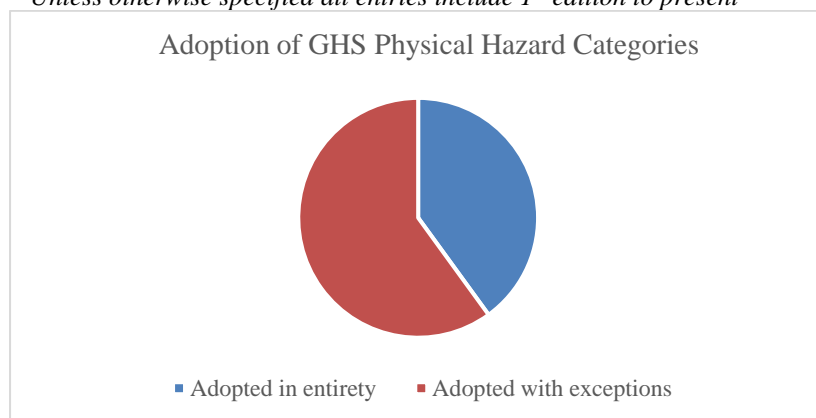
Question 5 – Other responses	
Australia	
Canada	
China	
EU	All the hazard classes and categories of the GHS have been included in the CLP regulation, except for the following: Flammable liquids Category 4, Acute Toxicity Category 5, Skin corrosion/irritation Category 3, Serious eye damage/ eye irritation Category 2B, Aspiration hazard Category 2 and Aquatic acute Categories 2 and 3.
Japan	
Malaysia	
New Zealand	
Republic of Korea	
UK	<p>The following hazard classes and categories from GHS version - GHS Rev. 7 - are not included:</p> <ul style="list-style-type: none"> Flammable liquids, Cat. 4 Acute toxicity, Cat. 5 Skin corrosion/irritation, Cat. 3 Serious Eye damage/Eye Irritation, Cat. 2A Serious Eye damage/Eye Irritation, Cat. 2B Aspiration hazard, Cat. 2 Acute hazards to aquatic environment, Cat. 2 Acute hazards to aquatic environment, Cat. 3 <p>Other hazards which do not result in classification (e.g. “dust explosion hazard”) or are not covered by the GHS.</p> <ul style="list-style-type: none"> Simple Asphyxiant Combustible Dust Hazard not otherwise classified (HNOC)
Vietnam	

Question 6 – For which hazard classes and categories from the GHS version used were classifications **not** performed?

Physical hazard classes/categories that were *not* adopted

	Explosives	Flamm. gases	Aerosols	Chemicals Under Pressure	Oxidizing gases	Gases under pressure	Flammable liquids	Flammable solids	Self reactive	Pyrophoric liquids	Pyrophoric solids	Self-heating	Water/emit flamm. gas	Oxidizing liquids	Oxidizing solids	Organic peroxides	Corrosive/metals	Desensitized explosives
Australia																		
Canada	Unstable 1.1-1.6 (1 st edition – Rev. 8)	Chem Unstable Cat A (Rev 4 -6) Chem Unstable Cat B (Rev. 4 – Rev. 6)	Cat 3 (Rev 4 -pres)															
China			Cat 2 Cat 3 (Rev 4 -pres.)				Cat 4									Type G		
EU							Cat 4											
Japan																		
Malaysia							Cat 4											
New Zealand																		
Republic of Korea		Chem Unstable Cat A (Rev 4 -6) Chem Unstable Cat B (Rev 4 – 6)					Cat 4											Cat 1 – 4 (Rev 6 – pres)
UK							Cat 4											
Vietnam																		

* Unless otherwise specified all entries include 1st edition to present

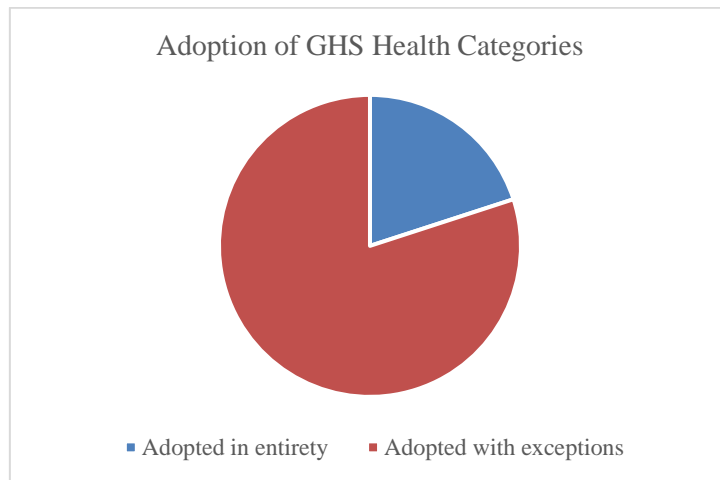


Health hazard classes/categories that were *not* adopted

	Acute Toxicity			Skin corrosion/irritation	Serious eye damage/irritation	Sensitization		Germ cell	carcinogenicity	Reproductive toxicity	STOT		Aspiration
	oral	inhalation	dermal			skin	respiratory				SE	RE	
Australia													
Canada	Cat 5	Cat 5	Cat 5	Cat 3									Cat 2
China	Cat 4-5	Cat 4-5	Cat 4-5	Cat 3									
EU	Cat 5	Cat 5	Cat 5	Cat 3	Cat 2B								Cat 2
Japan	Cat 5	Cat 5	Cat 5	Cat 3									Cat 2
Malaysia	Cat 5	Cat 5	Cat 5	Cat 3									
New Zealand	Cat 5	Cat 5	Cat 5	Cat 1^ Cat 3	Cat 2B			Cat 1A, 1B^	Cat 1A, 1B^	Cat 1A, 1B^			Cat 2
Republic of Korea	Cat 5	Cat 3-5	Cat 5	Cat 3									Cat 2
UK	Cat 5	Cat 5	Cat 5	Cat 3	Cat 2A; Cat 2B								Cat 2
Vietnam													

* Unless otherwise specified all entries include 1st edition to present

^ NZ has adopted Cat. 1A, 1B, 1C skin corrosion subcategories and Cat. 1 for germ cell, carcinogenicity, and reproductive toxicity hazards.



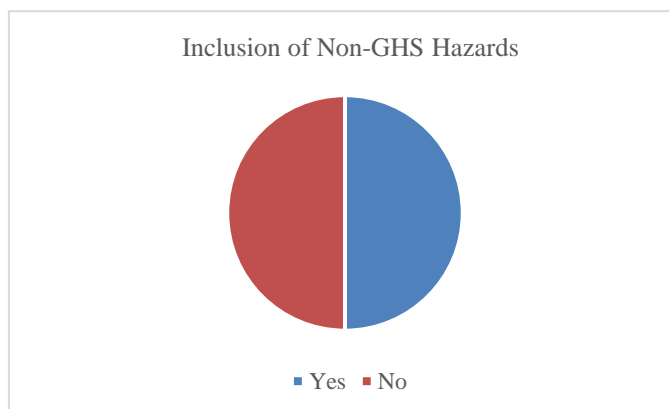
Environmental hazard classes/categories that were *not* adopted

	Hazardous to the aquatic environment	Hazardous to the ozone layer
Australia		
Canada	Category Acute 1 (1st edition to present) Category Acute 2 (1st edition to present) Category Acute 3 (1st edition to present) Category Chronic 1 (1st edition to present) Category Chronic 2 (1st edition to present) Category Chronic 3 (1st edition to present) Category Chronic 4 (1st edition to present)	Category 1 (GHS Rev.3 to present)
China	Category Acute 3 (1st edition to present) Category Chronic 4 (1st edition to present)	
European Union	Category Acute 2 and 3	
Japan ¹		
Malaysia	Category Acute 2 (1st edition to present) Category Acute 3 (1st edition to present)	
New Zealand	Category Acute 2 (1st edition to present) Category Acute 3 (1st edition to present)	Category 1 (GHS Rev.3 to present)
Republic of Korea	Category Acute 2 (1st edition to present) Category Acute 3 (1st edition to present)	
United Kingdom	Category Acute 2 and 3	
Vietnam		

1. Japan has provided the following additional information for Hazardous to the aquatic environment: all categories are adopted, but no substance has been classified as Category Chronic 4.

Question 7 – Does this list include hazards not addressed in the GHS?

	Yes (Y)/No (N)
Australia	Y
Canada	Y
China	N
European Union	Y
Japan	N
Malaysia	N
New Zealand	Y
Republic of Korea	N
United Kingdom	Y
Vietnam	N



Question 8 – If yes, please provide a brief description of the hazards.	
Australia	Australia recognises 12 non-GHS hazard statements regarding physical hazards and human health hazards. A list of these 12 non-GHS hazards statements can be found in Appendix D4 of the model Code of Practice: Labelling of workplace hazardous chemicals (https://www.safeworkaustralia.gov.au/doc/model-code-practice-labelling-workplacehazardous-chemicals)
Canada	<p>Combustible Dusts: a mixture or substance that is in the form of finely divided solid particles that, upon ignition, is liable to catch fire or explode when dispersed in air.</p> <p>Simple Asphyxiants: any gas that is liable to cause asphyxiation by the displacement of air.</p> <p>Pyrophoric Gases: any mixture or substance in a gaseous state that is liable to ignite spontaneously in air at a temperature of 54°C or less. Canada is proposing to repeal this hazard class when aligning with the 7th revised edition of the GHS as these gases will be classified as a Pyrophoric Gas under the category Flammable Gases 1A.</p> <p>Physical Hazards Not Otherwise Classified: a physical hazard presented by a product, mixture, material or substance that is different from any other physical hazard addressed by any other physical hazard class of the Hazardous Products Regulations, and that has the characteristic of occurring by chemical reaction and resulting in the serious injury or death of a person at the time the reaction occurs.</p> <p>Biohazardous Infectious Materials: any microorganism, nucleic acid or protein that causes or is a probable cause of infection, with or without toxicity, in humans or animals.</p> <p>Health Hazards Not Otherwise Classified: a health hazard presented by a mixture or substance that is different from any other health hazard addressed by any other health hazard class of the Hazardous Products Regulations and that has the characteristic of occurring via acute or repeated exposure and having an adverse effect on the health of a person exposed to it, including an injury, or resulting in the death of that person.</p>
China	
European Union	Annex II to CLP contains SPECIAL RULES FOR LABELLING AND PACKAGING OF CERTAIN SUBSTANCES AND MIXTURES, which include supplemental hazard information. These include the following EUH statements: EUH014 — ‘Reacts violently with water’; EUH018 — ‘In use, may form flammable/explosive vapour- air mixture; EUH019 — ‘May form explosive peroxides; EUH044 — ‘Risk of explosion if heated under confinement’; EUH029 — ‘Contact with water liberates toxic gas’; EUH031 — ‘Contact with acids liberates toxic gas’; EUH032 — ‘Contact with acids liberates very toxic gas’; EUH066 — ‘Repeated exposure may cause skin dryness or cracking’; EUH070 — ‘Toxic by eye contact; EUH071 — ‘Corrosive to the respiratory tract
Japan	
Malaysia	
New Zealand	<p>Hazardous to the terrestrial environment:</p> <ul style="list-style-type: none"> - hazardous to soil organisms - hazardous to terrestrial vertebrates - hazardous to terrestrial invertebrates - designed for biocidal action <p>These classifications are now applied only to agrichemicals and the active ingredients of agrichemicals.</p>
Republic of Korea	
United Kingdom	<p>See below for a list of hazard and precautionary statements included in the GB MCL system that are not included in the UN GHS (Globally Harmonized System of Classification and Labelling of Chemicals (GHS).</p> <p>1.EU-specific hazard statements The following EUH codes retained in the GB CLP Regulation represent supplemental hazard statements (risk phrases) relating to specific physical and health hazards that applied under the EU’s Dangerous Substances Directive (67/548/EEC) and Dangerous Preparations Directive 1999/45/EEC but not in the GHS and have therefore been carried through into the GB CLP Regulation as supplemental labelling:</p> <p>a.EUH001 — Explosive when dry</p>

Vietnam	<p>b.EUH006 — Explosive with or without contact with air c.EUH014 — Reacts violently with water d.EUH018 — In use, may form flammable/explosive vapour-air mixture e.EUH019 — May form explosive peroxides f.EUH029 — Contact with water liberates toxic gas g.EUH031 — Contact with acids liberates toxic gas h.EUH032 — Contact with acids liberates very toxic gas i.EUH044 — Risk of explosion if heated under confinement j.EUH066 — Repeated exposure may cause skin dryness or cracking k.EUH070 — Toxic by eye contact l.EUH071 — Corrosive to the respiratory tract.</p> <p>2. Other EUH statements are precautionary statements (safety-advice phrases), as supplemental information to be provided on the label or safety data sheets (SDS). The following are examples of these statements:</p> <p>a. EUH201 — Contains lead. Should not be used on surfaces liable to be chewed or sucked by children b. EUH202 — Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children c. EUH203 — Contains chromium (VI). May produce an allergic reaction d. EUH204 — Contains isocyanates. May produce an allergic reaction e. EUH205 — Contains epoxy constituents and may produce an allergic reaction f. EUH206 — Warning! Do not use together with other products. May release dangerous gases (chlorine) g. EUH207 — Warning! Contains cadmium. Dangerous fumes are formed during use. See information supplied by the manufacturer. Comply with the safety instructions h. EUH208 — Contains [insert name of sensitising substance]. May produce an allergic reaction i. EUH209 — Can become highly flammable in use j. EUH210 — Safety data sheet available on request k. EUH211 — Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. Liquid mixtures containing 1 % or more of titanium dioxide particles with aerodynamic diameter equal to or below 10 µm l. EUH212 — Warning! Hazardous respirable dust may be formed when used. Do not breathe dust. Solid mixtures containing 1 % or more of titanium dioxide m. EUH401 — To avoid risks to human health and the environment, comply with the instructions for use.</p> <p>3. In order to retain classification information more specific than what is supported in the GHS method, the EU CLP includes some H-statements that codify more precise information about the specific health hazards known to apply:</p> <p>a. H360Df — May damage the unborn child. Suspected of damaging fertility b. H360D — May damage the unborn child c. H360FD — May damage fertility. May damage the unborn child d. H360F — May damage fertility e. H360Fd — May damage fertility. Suspected of damaging the unborn child f. H361d — Suspected of damaging the unborn child g. H361fd — Suspected of damaging fertility. Suspected of damaging the unborn child h. H361f — Suspected of damaging fertility i. H350i — May cause cancer by inhalation.</p>
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Question 9 - Please provide a reference for the applied classification criteria (for example, the regulation or relevant version of the GHS, as applicable).

Australia	The relevant version of the GHS is GHS Rev. 7.
Canada	The Canadian Hazardous Products Regulations: https://laws-lois.justice.gc.ca/eng/regulations/SOR-2015-17/index.html
China	N/A
European Union	The current Annex I to the CLP Regulation (which contains the classification criteria) is based on GHS Rev 7
Japan	GHS Rev.6
Malaysia	1. Industry Code of Practice On Chemicals Classification And Hazard Communication, 2014 2. Industry Code of Practice on Chemicals Classification and Hazard Communication (Amendment) 2019: Part 1 3. Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013
New Zealand	Hazardous Substances (Hazard Classification) Notice 2020 https://www.epa.govt.nz/assets/Uploads/Documents/Hazardous-Substances/EPANotices/Hazardous_Substances_Hazard_Classification_Notice_2020.pdf
Republic of Korea	N/A
United Kingdom	The classification criteria in accordance with the 7th revised edition of the GHS are set out in the retained Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (the retained GB CLP Regulation) as amended in Great Britain by: <ul style="list-style-type: none"> • The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/720); and • The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020 (S.I. 2020/1567).
Vietnam	N/A

Question 10 - Additional Information (if applicable)

Canada - A correction was received pertaining to a guiding principle (b) question. The response has been updated accordingly.

Japan - Corrections were received for two guiding principle (b) questions as well as additional information. The responses have been updated accordingly.

Guiding principle (c): Only substances, as defined by the GHS, will be included in the global list of classified chemicals.

Question 1 - Does this list include: (Select all that apply) Substances (as defined by the GHS)? Mixtures (as defined by the GHS)? Other chemical compounds outside the scope of the GHS definition of substance and mixture?

	Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Substance (as defined by GHS)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mixture (as defined by GHS)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other chemical compounds outside the scope of the GHS definition of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

substance and mixture										
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Question 2 - *Other Chemical Compounds outside the scope of the GHS definition of substance and mixture (please provide definitions, as applicable)*

European Union - The list also includes UVCB substances According to the OECD, these are substances of unknown or variable composition, complex reaction products or biological materials. These are not currently defined in GHS. The list also includes multi-constituent substances. Some of the multi-constituent substances listed in Annex VI to CLP may also be defined as mixtures.

Question 3 - *Does this list include only prioritised chemicals?*

	Yes	No
Australia		
Canada		
China		
European Union		
Japan		
Malaysia		
New Zealand		
Republic of Korea		
United Kingdom		
Vietnam		

Question 4 - *If yes, is it limited to specific hazards?*

China – No, Japan – No, Malaysia - No

Question 5 - *If yes, please list and describe the hazards:*

Question not applicable

Question 6 - *If yes, is it limited to high-volume chemicals?*

China – No, Japan – No, Malaysia – No

Question 7 - *If yes, what other criteria are applied?*

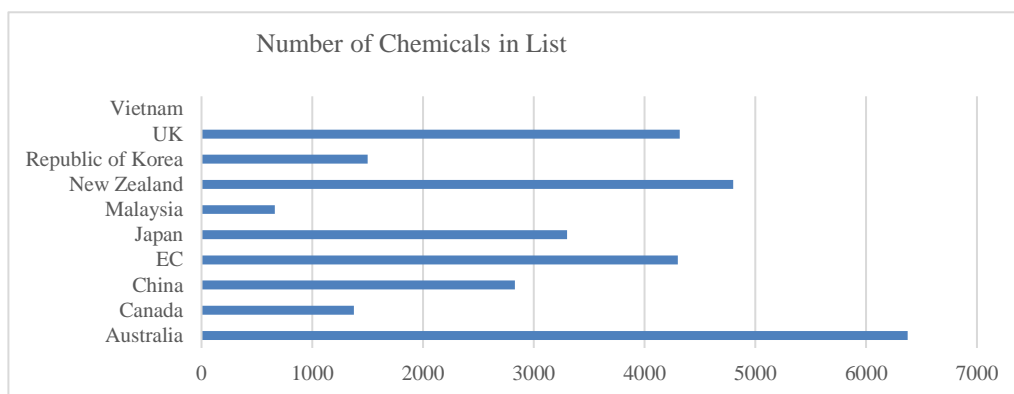
China – N/A, Japan – N/A, Malaysia – common chemicals

Question 8 - *What is the total number of chemicals on this list?*

Australia	6375
Canada	1375
China	2828
EU	>4300*
Japan+	~3300
Malaysia	662
New Zealand	~4800
Republic of Korea+	1500
UK	4317
Vietnam	

*4300, which covers a much larger number of substances because many of these are group entries (i.e., many substances covered by a single entry)

+ Updated information was provided post survey by competent authority representative



Question 9 – Optional: How many substances (as defined by the GHS)?

Australia	
Canada	
China	
EU	
Japan	~3300
Malaysia	
New Zealand	Most of the 4800
Republic of Korea	
UK	~9000*
Vietnam	

* The number of substances chemicals is higher because some group entries cover a number of different but related substances.

Question 10 – Optional: How many mixtures (as defined by the GHS)?

Australia	
Canada	
China	
EU	A number of multi-constituent substances listed in Annex VI to CLP may also be defined as mixtures.
Japan	
Malaysia	
New Zealand	There are some simple dilutions of substances listed also, e.g., Formaldehyde solution, >37% aqueous solution with >10% methanol
Republic of Korea	
UK	
Vietnam	

Question 11 – Optional: How many compounds excluded from the GHS definition of substances and mixtures?
No responses

Question 12 - Additional Information (if applicable):

European Union - Yes, additional information was received via email correspondence to complement guiding principle (c) questions. Responses have been updated accordingly.

Japan - A correction was received pertaining to a guiding principle (c) question. The response has been updated accordingly.

Republic of Korea - A correction was received pertaining to a guiding principle (c) question. The response has been updated accordingly.

Guiding principle (d): All substances must be accurately identifiable and described for each entry (e.g. including Chemical Abstracts Service Registry Numbers (CAS numbers), the UN numbers assigned under transport of dangerous goods regulations where assigned/applicable, and relevant impurities).

Question 1 – How are the chemicals identified on the list?

Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Common name	Common name		Common name	Common name	Common name	Common name	Common name	Common name	Common name
Chemical Abstract Service (CAS) Registry Number	Chemical Abstract Service (CAS) Registry Number	Chemical Abstract Service (CAS) Registry Number	Chemical Abstract Service (CAS) Registry Number	Chemical Abstract Service (CAS) Registry Number	Chemical Abstract Service (CAS) Registry Number	Chemical Abstract Service (CAS) Registry Number	Chemical Abstract Service (CAS) Registry Number	Chemical Abstract Service (CAS) Registry Number	Chemical Abstract Service (CAS) Registry Number
	International Union of Pure and Applied Chemistry (IUPAC) name	International Union of Pure and Applied Chemistry (IUPAC) name	International Union of Pure and Applied Chemistry (IUPAC) name			International Union of Pure and Applied Chemistry (IUPAC) name		International Union of Pure and Applied Chemistry (IUPAC) name	International Union of Pure and Applied Chemistry (IUPAC) name
	UN number (under UN Recommendations on the Transport of Dangerous Goods Model Regulations)					UN number (under UN Recommendations on the Transport of Dangerous Goods Model Regulations)			UN number (under UN Recommendations on the Transport of Dangerous Goods Model Regulations)
			Other			Other	National coding scheme	Regional coding scheme	National coding scheme
							Other	Other	

Question 2 – Other identifiers?

Australia	Canada	China	European Union	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
			EC Number (where applicable); ISO name (pesticides)			IUPAC name is not always present, but synonyms are given. Also UN number only applies to some substances.		Substances are identified and described by a 'Chemical Name' (EC name, CAS name, IUPAC name, synonyms, etc.) and by identity codes (EC number, CAS number). Whenever possible, plant protection products and biocides are designated by their ISO names.	

Question 3 - How are chemicals described for each entry on this list? For example, for chemicals on this list are relevant impurities named, if applicable?

Australia	In HCIS, additional information can be provided alongside the chemical's name, in the synonym section or as a note. For example, the HCIS entry for an ammonia solution ('ammonia ...%') is flagged with a note stating: "B (Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. Entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier should state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.)"
Canada	Where information is provided on the impurities, stabilizing additives and stabilizing solvents of a substance being assessed, such information is included in the respective database forming the basis for the classification. This information could be received in the course of conducting compliance and enforcement activities or in industry submissions received by Health Canada for exemptions from disclosing confidential business information on an SDS or label. Where information is available in a hazard study on the purity and any contaminants present in a tested substance, such information is also noted in the dataset forming the basis for the classification.
China	N/A
European Union	Where impurities contribute to the classification, they are usually included in the name of the substance
Japan	In principle substances are considered pure.
Malaysia	No
New Zealand	This definition of 'substance' is used as the definition of 'chemical' in approval instruments under the HSNO Act. However, the listings on CCID do not include information on impurities.
Republic of Korea	No
United Kingdom	Substances are described broadly in line with ECHA Guidance for identification and naming of substances under REACH and CLP and the information in the introduction in Part 1 of Annex VI to the GB mandatory classification and labelling list in the retained GB CLP Regulation as amended, including information listed for each entry and related classifications and hazard statements. Impurities, additives and minor components are normally not mentioned unless they contribute significantly to the classification of the substance. The GB MCL list includes a number of group entries. In these cases, the

	<p>classification requirements will apply to all substances covered by the description. In some cases, there are classification requirements for specific substances that would be covered by the group entry.</p> <p>Substances may contain impurities, additives, or other constituents while still meeting the substance definition in the retained GB CLP Regulation. This applies to both mono-constituent, multi-constituent (e.g. reaction masses) and UVCB substances. The classification of such impurities, additives or individual constituents may influence the classification of the substance, in addition to the other hazardous properties. If data on the substance with its components are not available, in principle, the same classification and labelling rules as for mixtures should apply also for such substances.</p>
Vietnam	N/A

Question 4 - Additional Information (if applicable)

None reported

Guiding principle (e): The data sets forming the basis for the chemical classification must be referenced with the classification. The source of the information must also be electronically available, and publicly accessible. The data should be derived using test methods that are scientifically sound and validated according to international procedures.

Question 1 - Are documents from the decision-making process electronically available and publicly accessible?

	Australia	Canada	China	EU	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes										
No										
Partially										

Question 2 - If partially, what are the limitations?

Australia	All the classification information published on HCIS has been sourced from AICIS and ECHA and is therefore available on their respective websites. However, information about how Safe Work Australia decides to reconcile any differing classification information from these sources for the same chemical is not made publicly available.
Canada	A rationale is provided for each classification in an electronic database; however, this information is not publicly accessible for this list as this list is private
China	
European Union	CLH proposal, comments received during consultation(s) in the CLH process and the opinion adopted by RAC are publicly available electronically.
Japan	
Malaysia	
New Zealand	
Republic of Korea	
United Kingdom	Documents from the GB MCL decision making process are electronically available and publicly accessible in a Table of Publications supporting decisions on new or revised GB mandatory classification and labelling (GB MCL) - GB MCL publication table. The limitations are that for GB MCL proposals arising from published RAC Opinions, the EU harmonised classification and labelling (CLH) report and the ECHA RAC Opinion are only available via https://echa.europa.eu/registry-of-clh-intentions-until-outcome .
Vietnam	

Question 3 - Is the dataset on which the classification is based referenced with the classification?

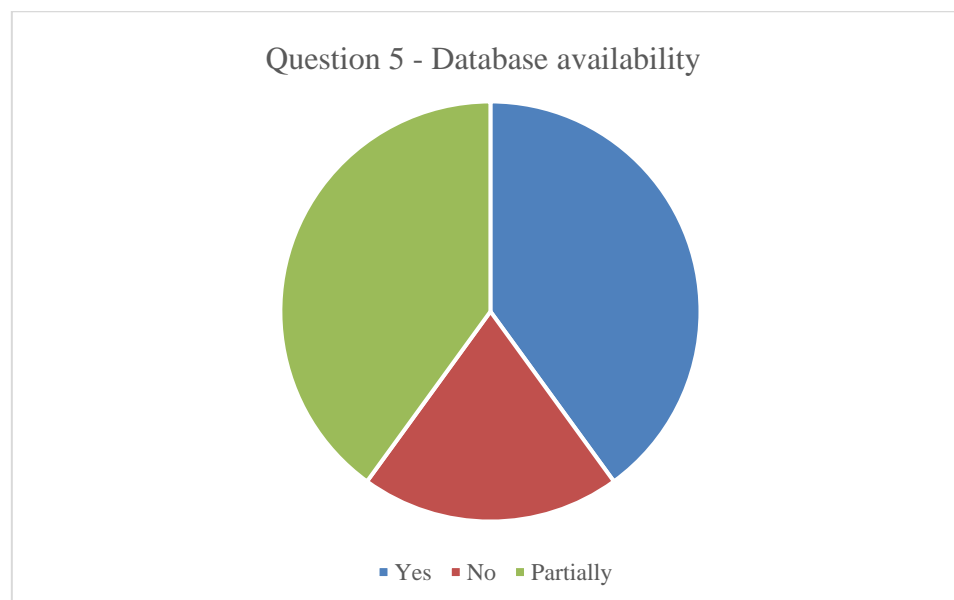
	Australia	Canada	China	EU	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes										
No										
Partially										

Question 4 - *If partially, what are the limitations?*

Australia	
Canada	
China	
European Union	
Japan	
Malaysia	
New Zealand	Generally yes, however, as noted earlier some early classifications were just based on 'translation' of EU Risk phrase classifications and data sets are not available in those cases.
Republic of Korea	
United Kingdom	
Vietnam	

Question 5 - *Is the dataset on which the classification is based electronically available and publicly accessible? If partially, what are the limitations?*

	Australia	Canada	China	EU	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes	x					x		x		x
No			x						x	
Partially		x		x	x		x			



Question 6 - *If partially, what are the limitations?*

Australia	
Canada	The majority of the hazard data forming the basis of the classifications is electronically available; however, a few sources previously used are on paper. The majority of the data used are from publicly available sources, with on occasion unpublished studies used that are provided by suppliers. Where unpublished studies are provided by a supplier, those studies are only used for classifications with respect to that supplier.
China	
European Union	Non-confidential information from the CLH process is publicly available, including summaries of the relevant studies. Confidential documents, including proprietary study reports and confidential comments received during the consultations are not publicly available.
Japan	Some books are not publicly accessible. Some electronically available data were revised or erased.
Malaysia	
New Zealand	References are given in the CCID listings but these are not electronically available through the CCID.
Republic of Korea	
United Kingdom	
Vietnam	

Question 7 - *Are the data available in sufficient detail for an independent assessment to be conducted?*

	Australia	Canada	China	EU	Japan	Malaysia	New Zealand	Republic of Korea	United Kingdom	Vietnam
Yes										
No										
Partially										

Question 8 - How does the classification process take GHS paragraph 1.3.2.4.3 into consideration, with the understanding that the classification process can be complex and available data from testing or studies will be dependent on the generally accepted standards of good scientific practice at the time the test or study was conducted?

Australia	We are unable to provide a response to this question as Safe Work Australia is not involved in the classification process. Hazard classification processes are the responsibility of AICIS and ECHA.
Canada	There is a provision in the Canadian Hazardous Products Regulations that captures the meaning of GHS paragraph 1.3.2.4.3 within our legislative framework. Therefore, the classification process takes GHS paragraph 1.3.2.4.3 into consideration. Classifications are performed in accordance with established scientific principles. Data permitted for use includes results of testing or studies carried out in accordance with the test methods referred to for the physical hazards or health hazards in the GHS, as well as results of testing or studies carried out in accordance with generally accepted standards of good scientific practice at the time the test or study was carried out. This includes data derived from tests within the Manual of Tests and Criteria and OECD Test Guidelines.
China	N/A
European Union	The CLH process takes paragraph 1.3.2.4.3 into consideration. However, since the process is dependent on existing data, data which is considered adequate and reliable even if OECD or similar principles have not been strictly followed, may also be considered in the process.
Japan	For the classification by the government there is guidelines with a list of documents to be referred. Data to classify chemicals are mainly from review of international organizations and peer reviewed paper.
Malaysia	Yes. Took the GHS process into consideration.
New Zealand	This approach is followed, together with a weight of evidence consideration.
Republic of Korea	Yes, there are some substances.
United Kingdom	If, for the purpose of the GB CLP Regulation, it is required or decided to generate new data, certain test methods and quality conditions must be met. Studies must be conducted in accordance with Test Methods Regulation (retained/amended GB version of Regulation (EC) 440/2008) or other international test methods validated according to international procedures such as those of the OECD. For physical hazards new tests must be carried out in compliance with a relevant recognised quality system or by laboratories complying with a relevant recognised standard, and for health and environmental hazards in compliance with the Good Laboratory Practice Regulations 1999 and the principles of Good Laboratory Practice (GLP39). Animal tests must comply with the tests on animals to which the Animals (Scientific Procedures) Act 1986 applies. Tests on non-human primates are prohibited for the purposes of the GB CLP Regulation. Tests on humans must not be performed for the purpose of the GB CLP Regulation. However, existing data obtained from other sources, such as accident records and epidemiological and clinical studies, can be used.
Vietnam	Tests that determine hazardous properties, which are conducted according to internationally recognized scientific principles, can be used for the purposes of a hazard determination for health and environmental hazards. The GHS criteria for determining health and environmental hazards are test method neutral, allowing different approaches as long as they are scientifically sound and validated according to international procedures and criteria already referred to in existing systems for the hazard of concern and produce mutually acceptable data. Test methods for determining physical hazards are generally more clearcut, and are specified in the GHS. (GHS paragraph 1.3.2.4.3)

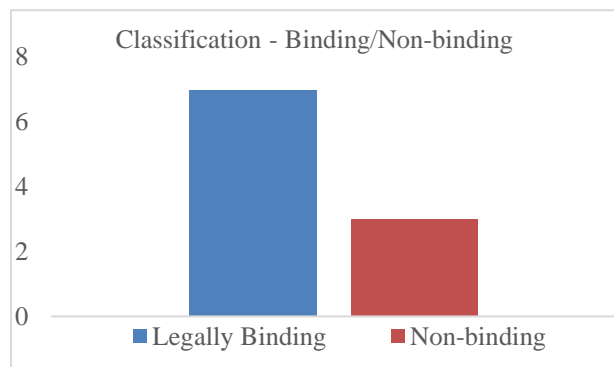
Question 9 - Additional Information (if applicable)

None reported

Guiding principle (f): The global list of chemical classifications will be non-binding. As with the GHS itself, countries will have the option to make the list binding if they adopt it through their legislative and/or regulatory process. Furthermore, the development of a global list is compatible with the GHS principle of self-classification.

Question 1 - Are the classifications legally binding or non-binding?

Australia	Non-binding
Canada	Legally binding
China	Legally binding
European Union	Legally binding
Japan	Non-binding
Malaysia	Legally binding
New Zealand	Legally binding
Republic of Korea	Legally binding
United Kingdom	Legally binding
Vietnam	Non-binding



Question 2 - Please provide the reference for the legislation

Australia	
Canada	The classification list is not legally binding in Canada, however the classifications may become legally binding on a case-by-case basis for an inspected party or claimant following the compliance verification process. See the Hazardous Products Act (https://laws-lois.justice.gc.ca/eng/acts/h-3/) and the Hazardous Materials Information Review Act (https://laws-lois.justice.gc.ca/eng/acts/H-2.7/).
China	N/A
European Union	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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 Accessible from https://echa.europa.eu/regulations/clp/legislation
Japan	
Malaysia	https://www.dosh.gov.my/index.php/legislation/eregulations/regulations-under-occupational-safety-and-health-act-1994-act-514/1125-01-occupational-safety-and-health-classificationlabelling-and-safety-data-sheet-of-hazardous-chemicals-regulations-2013/file
New Zealand	All of the substances on the CCID used to have legally binding classifications. However, in April 2021, when the old classifications were translated to GHS 7 classifications they were split. Substances which have a specific approval under the HSNO Act (designated with an approval number HSRxxxxxx) have legally binding classifications, but for substances which no longer have their own specific approval (but are able to be used under the group standard approval system) the classifications are provided for 'information purposes only'. See information at: https://www.epa.govt.nz/database-search/chemical-classification-and-information-databaseccid
Republic of Korea	Yes, some substances by different regulation.
United Kingdom	Article 38A of the retained Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (the GB CLP Regulation) as amended in Great Britain by: <ul style="list-style-type: none"> • The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 (S.I. 2019/720); and • The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020 (S.I. 2020/1567) The text of the retained Regulation is available on legislation.gov.uk but there are outstanding changes that have not yet been made: 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance) (legislation.gov.uk).
Vietnam	

Question 3 - Additional Information (if applicable)

None reported