

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

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Implementation of the GHS:

Cooperation with other bodies or international organizations

Update from the World Health Organization on GHS implementation issues: Adoption of GHS criteria in WHO/IPCS publications

Submitted by the World Health Organization (WHO)

Background

1. The World Health Organization (WHO) through the International Programme on Chemical Safety (IPCS) publishes a number of products providing information about the health effects of chemicals. The aim of WHO information products is to assist users to take preventive actions against adverse health and environmental impacts of chemicals. For example documents may be used for establishing guidelines and standards for the use of chemicals, or may be used directly by workers to provide essential health and safety information on chemicals in workplaces. WHO/IPCS publications can also assist with the implementation of GHS. Two relevant information products in this respect are the "*WHO Recommended Classification of Pesticides by Hazard*" and the *International Chemical Safety Cards* (ICSCs). It should be noted that none of these publications has any legal status.
2. The purpose of this informal document is to provide the Sub-Committee with an update on the current status of WHO/IPCS publications with respect to the implementation of GHS, and to indicate future plans.

WHO Recommended Classification of Pesticides by Hazard

3. The "*WHO Recommended Classification of Pesticides by Hazard*" was first published during the 1970s and has gained wide international acceptance, with updates being issued every few years. Up until 2009 the original guidelines for classification approved by the World Health Assembly in 1975 were followed. From the 2009 revision the principles of the GHS have been incorporated into the publication.
4. The WHO Classification scheme is intended to distinguish between the more and the less hazardous forms of each pesticide, and is based primarily on the acute oral or dermal toxicity of the technical form of the active substance. A method for establishing the classification of formulations is also included. Pesticides are classified into one of five Classes (Ia, Ib, II, III and U) with descriptions ranging from "*Extremely Hazardous*" to "*Unlikely to present acute hazard*". Many organizations refer to the Class Ia and Ib pesticides as '*Highly Hazardous Pesticides*' (HHPs). The classification criteria guide-points (cut-off levels) for the Classes were originally established during the 1970s. The classification of certain pesticides is adjusted to take account of severe hazards to health other than acute toxicity where necessary. These hazard Classes have become long established and are often

referred to in national pesticide registration schemes, scientific publications and guidance made available by International Organizations (e.g. FAO, World Bank).

5. From the 2009 revision, the GHS Acute Toxicity Hazard Categories for acute oral or dermal toxicity have been presented in the publication. It is hoped that making GHS classifications available in this publication should assist with the implementation of GHS in countries which utilise this publication for pesticide management. The WHO classification scheme was also revised in 2009, to more closely align with GHS and present a single scheme instead of separate schemes for liquids and solids. The WHO classification scheme is often used by jurisdictions who do not have sufficient resources to carry out toxicological evaluations of pesticides and only limited resources for chemicals management generally, and which have not yet been able to fully implement the GHS.

6. In 2019, the latest revision to the "*WHO Recommended Classification of Pesticides by Hazard*" was published. The revision includes approximately 100 new pesticide entries. The revision has also been published in French and Spanish for the first time. The French and Spanish versions of the publication present in the tables and indexes the French or Spanish names of pesticide active ingredients alongside the name in English. All language versions are freely available from:- <https://www.who.int/publications/item/9789240005662>.

FAO/WHO Guidance on Good Labelling Practice for Pesticides

7. FAO first published guidance on good labelling practice for pesticides in 1985 and has periodically revised the guidance to take account of developments in pesticide and chemicals management. Since 2007 FAO and WHO have jointly published guidance on pesticide management in the context of the *International Code of Conduct on Pesticide Management*. Revised *Guidelines on Good Labelling Practice for Pesticides* were published by FAO and WHO in 2015, introducing guidance on how to label pesticide products according GHS criteria, and recommending progressive adoption of the GHS for classification and labelling of pesticides – including if necessary transitioning from using the *WHO Recommended Classification of Pesticides by Hazard* to using the GHS.

8. In 2021 a further revision of the *FAO/WHO Guidance on Good Labelling Practice for Pesticides* has been prepared for publication. The latest revision stresses further the importance to use the GHS for pesticide labelling purposes. The advantage of harmonized classification and labelling across jurisdictions to improve comprehension of chemical risks and to facilitate trade in pesticides is emphasized. To avoid conflicts in classification and confusion for users, the guidance recommends that GHS should be the only classification scheme used for labelling health hazards of pesticides. In addition, it makes further reference to the GHS by proposing that hazard colour bands could be added to pesticide labels to take into account both acute and severe chronic health hazards, using the GHS criteria for carcinogenicity, mutagenicity and reproductive toxicity. This goes beyond the previous version of the guidance which covered only acute toxicity.

International Chemical Safety Cards

9. International Chemical Safety Cards (ICSCs) provide essential health and safety information on chemicals in a concise format, including information on intrinsic hazards, first aid and fire-fighting measures and precautions relevant to storage, spillage, transport and disposal. The ICSCs are a collaborative programme between WHO and the International Labour Organization (ILO). ICSCs on 1,700 chemicals are freely available via the Internet and can be viewed in 13 languages (<https://www.ilo.org/dyn/icsc/showcard.home>). The languages currently available are English, Spanish, Persian, French, Finnish, Hebrew, Hungarian, Italian, Chinese, Korean, Polish, Russian and Japanese, and further languages are in development.

10. GHS information (pictograms and hazard statements) have been progressively added to ICSCs when they were created or reviewed since 2006, and to date 674 ICSCs have GHS

information. It is intended that eventually all of the ICSCs will be reviewed according to the GHS.

Nanomaterials

11. The Sub-Committee has previously discussed the application of GHS classification criteria to the nanoforms of chemicals. In 2017, WHO published “*Guidelines on protecting workers from potential risks of manufactured nanomaterials*” [<https://www.who.int/publications/i/item/9789241550048>]. Those WHO Guidelines included a recommendation to assign hazard classes to manufactured nanomaterials according to the GHS for use in safety data sheets. At a nanosafety training workshop in 2018 convened by the United Nations Institute for Training and Research (UNITAR) and partners, it was discussed that the International Chemical Safety Cards could be a suitable tool to pilot classifying the nanoform of chemicals according to GHS.

12. Following the suggestion made at the UNITAR workshop, an ICSC peer review meeting in 2019 reviewed the ICSCs for three materials – titanium dioxide, zinc oxide and silver – to explore the possibility of creating ICSCs for the nanoforms of those materials in addition to the bulk forms, including appropriate GHS information. The conclusion of the ICSC peer review meeting was that new ICSCs could be published for “Titanium dioxide (nanoform) P25” and “Zinc oxide (nanoform)”, in addition to the ICSCs for the bulk materials. It was concluded for silver that there were insufficient data to assess the hazards of the nanoform and a separate ICSC for the nanoform was not published. A note with reference to the nanoform of silver was added to the ICSC for the bulk material. All published ICSCs can be viewed at <https://www.ilo.org/dyn/icsc/showcard.home>.

13. No ICSC meetings have taken place since 2019. WHO will continue to liaise with UNITAR and other interested stakeholders on this issue.
