

An update to the purple book and beyond

A look at some of the changes expected in the revised edition of GHS, and the topics planned by the UNSCEGHS for the 2015/2016 biennium



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The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) is an international guidance system, intended to harmonise the classification and labelling of hazardous chemicals in order to improve workplace and environmental safety, and to ensure consumer protection. The official text of the GHS, also known as the “purple book”, was first published in 2003 and is amended every two years. All amendments are prepared, taking into consideration the latest scientific achievements by the UN’s Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals (UNSCEGHS), and are officially approved by the UN’s Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals (UNCETDG/GHS).

On January 27, the final report of the 7th session of the UNCETDG/GHS was published. It came with proposed amendments to the existing text of the GHS - adopted during the 25th, 26th, 27th and 28th sessions of UNSCEGHS. Included were topics for discussions within the UNSCEGHS working groups, during the next 2015/2016 biennium. Among the proposed amendments to the 5th revised edition of GHS are: a new hazard class and category, a new addition to the safety data sheets (SDS) guidance and examples of labelling of small packaging. Since the amendments are not published yet, all analyses are based on the content of the reports of the UNSCEGHS latest four sessions (25-28). These are the main changes expected:

» **New hazard class and category** – desensitised explosives are the newest hazard class to be added as a new Chapter

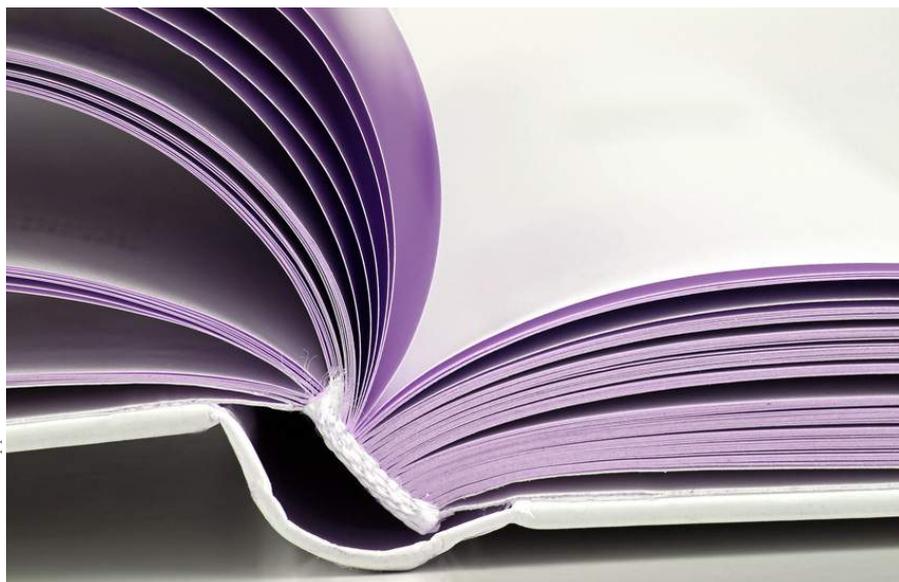


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2.17 in part 2 of the GHS “Physical hazards”.

They are defined as substances or mixtures, which can be exempt from the hazard class “explosives” because they are “phlegmatised to suppress their explosive properties, in such a manner that they do

The newly added hazard category consists of the group of pyrophoric gases, which may ignite spontaneously when exposed to air at certain temperatures

not mass explode and do not burn too rapidly”. The class includes four hazard categories, classified according to specified criteria, and incorporates solid or liquid forms. Moreover, depending on the purpose, different regulations may be

applicable to a desensitised explosive. For transportation, the solid desensitised explosives have to be referred for classification to the UN’s Recommendations on the Transport of Dangerous Goods.

The newly added hazard category consists of the group of pyrophoric gases, which are defined as gases that may ignite spontaneously when exposed to air at certain temperatures. Taking into consideration a US proposal, the UNSCEGHS had prepared an amendment to add them as a sub-category in the flammable gases hazard class.

» **SDS** – regarding the safety data sheet, the draft amendment revises section 9 of Annex 4 “Physical and chemical properties and safety characteristics” of the GHS. The updated text includes detailed additional instructions about the properties and safety characteristics, presented in the newly created table A4.3.9.1, “Basic physical and chemical properties”. Supplemental information, containing data

relevant to the physical hazard classes, is introduced in table A4.3.9.2. The newly added note in the updated table 1.5.2 in chapter 1.5 (part 1) of the GHS will allow government authorities to determine the order or re-arrange the properties listed in section 9 of the SDS.

» **Labelling of small packaging** – the proposed amendment to small package labelling includes a new example No 8 in Annex 7 of the GHS. It is designed to improve the graphic representation of the labelling elements on small packages and to differentiate the inner from the outer package labelling.

These recommended amendments for the 5th revised edition of GHS are the culmination of discussions to improve the text of the guidance in relation to certain topic areas. However, the UNSCEGHS has other subject areas it is planning to work on. Annex III of the 28th UNSCEGHS session report contains a work programme for the 2015/2016 biennium, with areas listed for further evaluation and development by the GHS Sub-Committee, including additional guidance on explosives, further review of

the classifications of flammable gases and applicability of the GHS to nanomaterials. Under the leadership of Australia, the UNSCEGHS experts will explore the need to develop additional guidance on classification and hazard communication requirements for explosives in manufacturing, storage and usage applications other than transport.

The plan for the next biennium also includes a review of the classification of flammable gases. A joint Transport of Dangerous Group (TDG)-GHS informal working group will continue to explore possibilities of establishing additional flammable gases classification criteria in order to form new hazard class subdivisions.

With regard to labelling, eliminating redundancy in the hazard (H) and precautionary (P) statements will continue to be the main task for the UNSCEGHS experts, led by the UK. The task group will also concentrate its attention on expanding the guidance and precedent rules for use of H and P statements.

» **Nanomaterials:** – the UNSCEGHS

nanomaterials task force will continue its exploratory work on establishing whether nano-forms of substances are within the scope of the GHS and will determine the applicability of the existing GHS classification and labelling criteria to nanomaterials, including substances in bulk.

With the latest proposed amendments, the UNSCEGHS continues a trend of improving GHS efficiency, in relation to the safe handling of chemicals during their lifecycle. The topics included in the work programme for the next biennium will apply the same practical and straightforward approach, which should motivate more governments and private stakeholders to look to the GHS for guidance in the proper management of chemicals.

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