

Nanomaterials classification and labelling – status of work undertaken in GHS (Globally Harmonized System of Classification and Labelling of Chemicals)

Presentation prepared by
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**Committee of Experts on the Transport of Dangerous Goods (TDG)
and on the Globally Harmonized System of Classification and
Labelling of Chemicals**



**Sub-Committee of Experts
on the TDG**



**Sub-Committee of Experts
on the GHS**



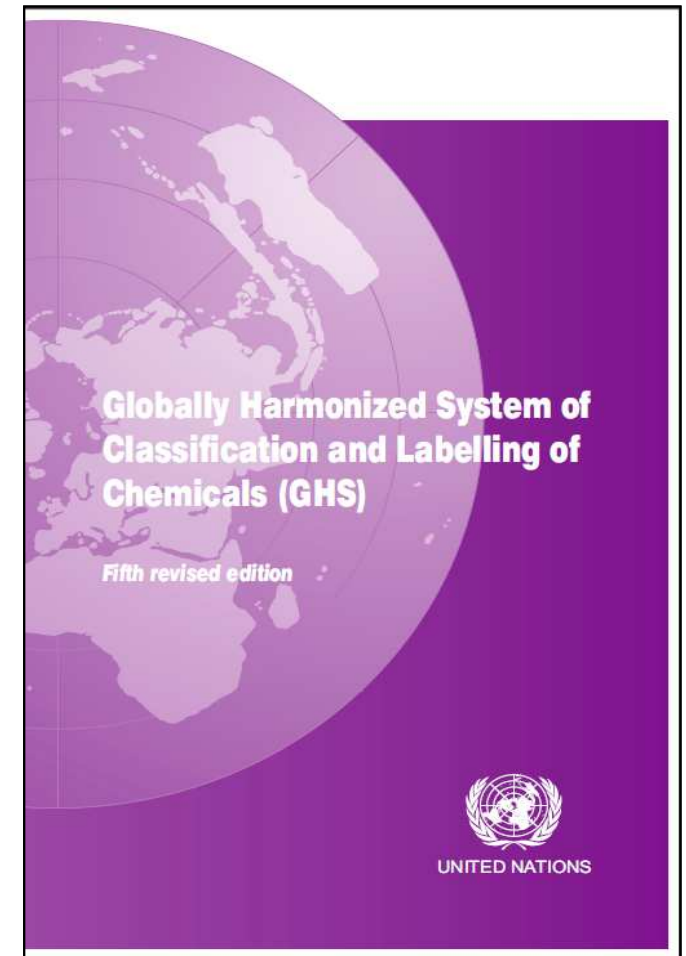
**Recommendations on the Transport of
Dangerous Goods - Model Regulations**



**Globally Harmonized System of Classification
and Labelling of Chemicals**

GHS

- Covers:
 - Hazard classification (acute and chronic effects): Physical, health and environmental hazards
 - Hazard communication (labels, SDS)
- Address chemicals during handling, transport, supply and use;
- Designed to allow self-classification (no list of chemicals);
- Allow application of its elements following a “building block approach”.



Nanomaterials introduction

- Nanosubstances may have new properties in comparison with the same chemical substance at another scale (substance in its conventional form or among different nanoforms of the same substance).
- Concerns are raised about some properties of nanomaterials, in particular those related to health and environmental aspects.
- Risk assessment capabilities with regard to these new properties, and particularly regarding the new surface chemical reactivity they present because of their particle size and granulometric distribution are required.
- In the regulatory risk assessment paradigm, the hazard properties should be first identified, mainly through a classification and information system. The GHS does not provide any guidance on what specific nanomaterial information is relevant and when the communication of this information could be appropriate.

GHS Sub-Committee's activities

- By the initiative of France, discussions on nanomaterials started in 2008 with a proposal for inclusion of the issue in the programme of work for the biennium 2009-2010.
- No work was undertaken to explain explicitly in the GHS how to produce appropriate information on nanomaterials for classification and labelling purposes (including hazard communication via the safety data sheets, SDS).
- Due to the availability of scientific results worldwide, but the absence of an explicit and harmonized approach which should define the appropriate information in the SDS, a new item, “Review of the applicability of GHS to nanomaterials” was included in the program for the biennium 2013-2014.
- An informal correspondence group (ICG) was created.

GHS Sub-Committee's activities

The terms of reference of the ICG were clarified during the 26th session (2013)

- ✓ To establish whether there is a need to amend the GHS to make clear that nano-forms of a substance are within scope of the GHS;
- ✓ To review the classification and labelling criteria in the GHS to establish whether they are appropriate for nano, as well as bulk-forms of a substance;
- ✓ To review the content of safety data sheets set out in the GHS in terms of their applicability to nano-forms of a substance;
- ✓ To report back to the Sub-Committee on the outcomes of (a) to (c) and to propose further work, as appropriate.

GHS Sub-Committee's activities

The ICG is trying to answer the main question “Can classification of nanomaterials be made by applying the existing criteria in the GHS, by collecting data from some examples of nanomaterial substances and performing a classification exercise?”

The ICG also agreed that:

- the envisaged workstreams and the possible developments of the group for the GHS are long-term processes;
- to continue the work on reviewing the applicability of the GHS classification criteria to nanomaterials during the biennium 2015-2016.

For more information, please contact the focal point of the ICG: matthieu.lassus@travail.gouv.fr or the secretariat of the GHS Sub-Committee rosa.garcia.couto@unece.org and alibech.mirelesdiaz@unece.org

Reference documents

Main issues currently being addressed by the ICG and additional information can be found in:

- <http://www.unece.org/fr/trans/main/dgdb/dgsubc4/c4inf28.html>

Other reference documents are:

- <http://www.unece.org/fileadmin/DAM/trans/doc/2008/ac10c4/UN-SCEGHS-16-inf22e.pdf>
- <http://www.unece.org/fileadmin/DAM/trans/doc/2009/ac10c4/ST-SG-AC10-C4-2009-03e.pdf>
- <http://www.unece.org/fileadmin/DAM/trans/doc/2010/ac10c4/ST-SG-AC10-C4-2010-19e.pdf>
- <http://www.unece.org/fileadmin/DAM/trans/doc/2010/ac10c4/UN-SCEGHS-20-INF25e.pdf>
- <http://www.unece.org/fileadmin/DAM/trans/doc/2013/dgac10c4/ST-SG-AC10-C4-2013-3e.pdf>



Thank you!



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