

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

8 December 2010

Twentieth session

Geneva, 7–9 December 2010

Item 3 of the provisional agenda

Hazard communication issues

Comments on ST/SG/AC.10/C.4/2010/19

Transmitted by the expert from China

Issue

1. The experts from P. R. China consider that the Sub-Committee may be supposed to pay enough attention on the health hazard risk of nanomaterials which has been accepted by more and more people currently.
2. The experts from Australia have proposed that the Sub-Committee consider the additional physicochemical information items for inclusion in section A4.3.9.3 of Annex 4 of the GHS. We agree with the document and discussed in details.
3. The paper in particular argues that:
 - (a) How to define the concept of nanomaterials;
 - (b) The additional physicochemical information items mentioned in the document seem to need to be supplemented.

How to define the concept of nanomaterials

4. The definition of “nanoscale” is having one or more dimensions of the order of 100 nm or less. And nanomaterial means that material with one or more external dimensions, or an internal structure, at nanoscale. and which could exhibit novel characteristics compared to the same material at a larger scale. So we believe it is the key issue that for a certain kind of material, how to recognize it as nanomaterials. Even the toxicological data can not give us any help at this point. For example, the particles of some materials are micron scale, but they have internal nanoscale structure and nano-characteristics, even health hazard risk. Therefore we should regard these micron scale materials as nanomaterials. So we should make out the code of practice for the definition of nanomaterials before revise the Code of Practice for SDS.

The additional physicochemical information items mentioned in the document seem to need to be supplemented

5. For the nanomaterials above which have internal nanoscale structure and nano-characteristics, the physical and chemical parameters mentioned in the document seem not to be able to fully characterize, the pore volume and pore size are important parameters that should be added to the parameters list.
