Examples on the application of GHS criteria

Note by the secretariat

1. At its 24th session, the Sub-Committee adopted some examples on the application of GHS criteria to be included in UNITAR’s advance course on GHS.

2. However, noting that the training course was not publicly available, the Sub-Committee considered that the best option to ensure their public availability was to include the examples as part of the information published on the UNECE secretariat’s webpage on guidance on the GHS (refer to the report of the Sub-Committee of Experts on its 24th session, document ST/SG/AC.10/C.4/48, paragraphs 33 and 34).

3. Following the request from the Sub-Committee, the secretariat prepared a consolidated version of each of the examples, including when applicable, all corrections and amendments adopted by the Sub-Committee so far.

4. The list of available examples (as of June 2013) is as follows:

• Acute toxicity (Chapter 3.1)
  (a) Application of data when the available range data spans more than one acute toxicity range estimate in Table 3.1.2;
  (b) Application of the “relevant ingredients” criteria in paragraph 3.1.3.3
  (c) Application of the criteria in paragraph 3.1.3.6.1 (c)
  (d) Application of the criteria in paragraph 3.1.3.2
  (e) Dilution bridging principle example using acute toxicity data
  (f) Concentration of highly toxic mixtures bridging principle example using acute toxicity data;

• Skin corrosion/irritation (Chapter 3.2)
  (a) Interpolation within one hazard category bridging principle example using skin corrosion/irritation data;
  (b) Interpolation within one hazard category using skin corrosion in vitro data from a Human Skin Model (HSM) test (OECD TG 431);

1 http://www.unece.org/trans/danger/publi/ghs/guidance.html
(c) Aerosols bridging principle example using skin corrosion/irritation data;

- **Serious eye damage/eye irritation (Chapter 3.3)**
  
  (a) application of the relevant ingredients concept for mixtures for serious eye damage/eye irritation;

- **Skin corrosion/irritation (Chapter 3.2) and serious eye damage/eye irritation (Chapter 3.3)**
  
  (a) Application of data for mixtures when additivity may not apply (paragraphs 3.2.3.3.4 and 3.3.3.3.4);
  
  (b) Classification of a mixture for skin corrosion/irritation and serious eye damage/irritation following the tiered evaluation approach using serious eye damage/eye irritation in vitro data from a Bovine Corneal Opacity and Permeability (BCOP) test (OECD TG 437);

- **Respiratory or skin sensitization (Chapter 3.4)**
  
  (a) Substantially similar mixtures bridging principle example using skin sensitization data

- **Specific target organ – single exposure (Chapter 3.8)**
  
  (a) Application of the guidance in paragraph 3.8.3.4.5, that is, whether or not additivity should be considered for Specific Target Organ Toxicity – Single Exposure (STOT-SE) Category 3 transient effects;
  
  (b) Batching bridging principle example using specific target organ toxicity – single dose data;

- **Hazardous to the aquatic environment (Chapter 4.1)**
  
  (a) application of the summation methods when classification information is available for some or all of the ingredients of a mixture;
  
  (b) application of a stepped approach where the additivity formula is used for the part of the mixture that has chronic toxicity data and passing that result into the summation method;
  
  (c) application of the tiered approach to determining the mixture’s classification where acute toxicity data is available on the mixture as a whole as well as on the ingredients, and chronic classification information is only available on the ingredients;
  
  (d) classification when there are acute toxicity data as well as hazard classification information available for all relevant components of an untested mixture;

5. The list of examples on the guidance webpage will be updated in accordance with any decision that the Sub-Committee may wish to take on new or existing examples in the future.