

## 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

Ninth session, 11-13 July 2005  
Item 3 (c) of the provisional agenda

#### Hazard communication issues

#### Numbering of GHS hazard statements

#### Transmitted by the expert from Australia

#### Introduction

1. This informal document provides comments and suggested improvements on the hazard statement numbering system proposed in ST/SG/AC.10/C.4/2005/1 – *Numbering of GHS Hazard Statements*. Our proposal is an extension to the work presented in UN/SCEGHS/9/INF.7 – *Codification of Precautionary Statements*.

#### Discussion

2. In our proposal, hazard statements are grouped depending on whether they relate to physical, health or environmental hazards. Statements within each group are then numbered using a three-digit number: H100-H128 for physical hazards, H200-H234 for health hazards and H300-H306 for environmental hazards (Annex 1).

3. Each hazard statement is given a unique number. This numbering system has the benefit that if any related statements are added to the system in the future then they can be inserted into the appropriate group using the unassigned numbers.

4. In the proposal in ST/SG/AC.10/C.4/2005/1 – *Numbering of GHS Hazard Statements*, several statements are grouped together with the same number. For example, Hazard number 32 incorporates the statements “Fatal if swallowed, Fatal in contact with skin and Fatal if inhaled”. Similarly, Hazard numbers 33, 34 and 35 all group three hazard statements together. Under the proposal outlined in this paper, each hazard statement is given a different number.

5. It was also noted that number 23 has been assigned to “There are no label elements allocated to this hazard category”. It is recommended that this statement should not be given a number.

#### Recommendation

6. It is recommended that the hazard statement numbering system described above be adopted for the reasons outline in the discussion.

## Annex 1: Codified hazard statements

<b><u>Code</u></b>	<b><u>Hazard Statement</u></b>
H100	<b>Unstable explosive</b>
H101	<b>Explosive; mass explosion hazard</b>
H102	<b>Explosive; severe projection hazard</b>
H103	<b>Explosive; fire, blast or projection hazard</b>
H104	<b>Fire or projection hazard</b>
H105	<b>May explode in fire</b>
H106	<b>Extremely flammable gas</b>
H107	<b>Flammable gas</b>
H108	<b>Extremely flammable aerosol</b>
H109	<b>Flammable aerosol</b>
H110	<b>May cause or intensify fire; oxidizer</b>
H111	<b>Contains gas under pressure; may explode if heated</b>
H112	<b>Contains refrigerated gas; may cause cryogenic burns or injury</b>
H113	<b>Extremely flammable liquid and vapour</b>
H114	<b>Highly flammable liquid and vapour</b>
H115	<b>Flammable liquid and vapour</b>
H116	<b>Combustible liquid</b>
H117	<b>Flammable solid</b>
H118	<b>Heating may cause an explosion</b>
H119	<b>Heating may cause a fire or explosion</b>
H120	<b>Heating may cause a fire</b>
H121	<b>Catches fire spontaneously if exposed to air</b>
H122	<b>Self-heating; may catch fire</b>
H123	<b>Self-heating in large quantities; may catch fire</b>
H124	<b>In contact with water releases flammable gases which may ignite spontaneously</b>
H125	<b>In contact with water releases flammable gas</b>
H126	<b>May cause fire or explosion; strong oxidizer</b>
H127	<b>May intensify fire; oxidizer</b>
H128	<b>May be corrosive to metals</b>
H200	<b>Fatal if swallowed</b>
H201	<b>May be fatal if swallowed and enters airways</b>
H202	<b>Fatal in contact with skin</b>
H203	<b>Fatal if inhaled</b>
H204	<b>Toxic if swallowed</b>
H205	<b>Toxic in contact with skin</b>
H206	<b>Toxic if inhaled</b>
H207	<b>Harmful if swallowed</b>
H208	<b>Harmful in contact with skin</b>
H209	<b>Harmful if inhaled</b>
H210	<b>May be harmful if swallowed</b>
H211	<b>May be harmful if swallowed and enters airways</b>

H212	<b>May be harmful in contact with skin</b>
H213	<b>May be harmful if inhaled</b>
H214	<b>Causes severe skin burns and eye damage</b>
H215	<b>Causes skin irritation</b>
H216	<b>Causes mild skin irritation</b>
H217	<b>Causes serious eye damage</b>
H218	<b>Causes serious eye irritation</b>
H219	<b>Causes eye irritation</b>
H220	<b>May cause allergy or asthma symptoms or breathing difficulties if inhaled</b>
H221	<b>May cause an allergic skin reaction</b>
H222	<b>May cause genetic defects</b> <i>&lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;</i>
H223	<b>Suspected of causing genetic defects</b> <i>&lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;</i>
H224	<b>May cause cancer</b> <i>&lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;</i>
H225	<b>Suspected of causing cancer</b> <i>&lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;</i>
H226	<b>May damage fertility or the unborn child</b> <i>&lt;state specific effect if known&gt;</i> <i>&lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;</i>
H227	<b>Suspected of damaging fertility or the unborn child</b> <i>&lt;state specific effect if known&gt;</i> <i>&lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;</i>
H228	<b>May cause harm to breast-fed children</b>
H229	<b>Causes damage to organs</b> <i>&lt;or state all organs affected, if known&gt;</i> <i>if &lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;</i>
H230	<b>May cause damage to organs</b> <i>&lt;or state all organs affected, if known&gt;</i> <i>if &lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;</i>
H231	<b>Causes damage to organs</b> <i>&lt;state all organs affected, if known&gt;</i> <b>through prolonged or repeated exposure</b> <i>&lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;</i>
H232	<b>May cause damage to organs</b> <i>&lt;state all organs affected, if known&gt;</i> <b>through prolonged or repeated exposure</b> <i>&lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;</i>
H233	<b>May cause respiratory irritation</b>
H234	<b>May cause drowsiness and dizziness</b>
H300	<b>Very toxic to aquatic life</b>
H301	<b>Toxic to aquatic life</b>
H302	<b>Harmful to aquatic life</b>
H303	<b>Very toxic to aquatic life with long lasting effects</b>
H304	<b>Toxic to aquatic life with long lasting effects</b>
H305	<b>Harmful to aquatic life with long lasting effects</b>
H306	<b>May cause long lasting harmful effects to aquatic life</b>