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Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals
(Third session, 10-12 July 2002)

Amendment to the GHS

Transmitted by the Organisation for Economic Co-Operation and Development (OECD)

Proposal

Annex 3 of document ST/SG/AC.10/C.4/2001/26 shows classification and labelling summary tables. The classification and labelling summary tables regarding chapter 3.10 on hazards to the aquatic environment were missing and are proposed here below.

Acute hazards to the aquatic environment (See Chapter 3.10 for details)

Hazard category	Criteria	Hazard communication elements	
1	*1. For Substances and Tested Mixtures:* • $L(E)C_{50} \leq 1mg/L$ where $L(E)C_{50}$ is either fish 96hr LC_{50}, crustacea 48hr EC LC_{50} or aquatic plant 72 or 96hr ErC_{50} *2. If data for a mixture are not available,* use bridging principles (see paragraphs 33-39) *3. If bridging principles do not apply,* (a) For mixtures with classified ingredients: The <u>summation</u> method (see paragraph 44-50) reveals: • [Concentration of Acute 1] x M > 25% where M is a multiplying factor (see paragraph 56). (b) For mixtures with tested ingredients: The <u>additivity</u> formula (see paragraph 41-42) reveals: • $L(E)C_{50} \leq 1mg/L$ (c) For mixtures with both classified and tested ingredients: The combined <u>additivity</u> formula and <u>summation</u> method (see paragraphs 41-50) reveal: • [Concentration of Acute 1] x M > 25% *4. For mixtures with no usable information for one or more relevant ingredients, c*lassify using the available information and add the statement: "x percent of the mixture consists of component(s) of unknown hazards to the aquatic environment".	Symbol	
		Signal word	Warning
		Hazard statement	Very toxic to aquatic life

2	*1. For Substances and Tested Mixtures:* • 1mg/L < $L(E)C_{50}$ ≤ 10mg/L where $L(E)C_{50}$ is either fish 96hr LC_{50}, crustacea 48hr EC LC_{50} or aquatic plant 72 or 96hr ErC_{50} *2. If data for a mixture are not available,* use bridging principles (see paragraphs 33-39) *3. If bridging principles do not apply,* (a) For mixtures with classified ingredients: The <u>summation</u> method (see paragraph 44-50) reveals: • [Concentration of Acute 1] x M x 10 + [Concentration of Acute 2] > 25% where M is a multiplying factor (see paragraph 56). (b) For mixtures with tested ingredients: The <u>additivity</u> formula (see paragraph 41-42) reveals: • 1mg/L < $L(E)C_{50}$ ≤ 10mg/L (c) For mixtures with both classified and tested ingredients: The combined <u>additivity</u> formula and <u>summation</u> method (see paragraphs 41-50) reveal: • [Concentration of Acute 1] x M x 10 + [Concentration of Acute 2] > 25% *4. For mixtures with no usable information for one or more relevant ingredients, c*lassify using the available information and add the statement: "x percent of the mixture consists of component(s) of unknown hazards to the aquatic environment".	Symbol	No symbol used
		Signal word	No signal word
		Hazard statement	Toxic to aquatic life

3	*1. For Substances and Tested Mixtures:* • 10mg/L < $L(E)C_{50}$ ≤ 100mg/L where $L(E)C_{50}$ is either fish 96hr LC_{50}, crustacea 48hr EC LC_{50} or aquatic plant 72 or 96hr ErC_{50} *2. If data for a mixture are not available,* use bridging principles (see paragraphs 33-39) *3. If bridging principles do not apply,* (d) For mixtures with classified ingredients: The <u>summation</u> method (see paragraph 44-50) reveals: • [Concentration of Acute 1] x M x 100 + [Concentration of Acute 2] x 10 + [Concentration of Acute 3] > 25% where M is a multiplying factor (see paragraph 56). (e) For mixtures with tested ingredients: The <u>additivity</u> formula (see paragraph 41-42) reveals: • 10mg/L < $L(E)C_{50}$ ≤ 100mg/L (f) For mixtures with both classified and tested ingredients: The combined <u>additivity</u> formula and <u>summation</u> method (see paragraphs 41-50) reveal: • [Concentration of Acute 1] x M x 100 + [Concentration of Acute 2] x 10 + [Concentration of Acute 3] > 25% *4. For mixtures with no usable information for one or more relevant ingredients, c*lassify using the available information and add the statement: "x percent of the mixture consists of component(s) of unknown hazards to the aquatic environment".	Symbol Signal word Hazard statement	No symbol used No signal word Harmful to aquatic life

Chronic hazards to the aquatic environment (See Chapter 3.10 for details)

<table>
<tr><th>Hazard category</th><th>Criteria</th><th colspan="2">Hazard communication elements</th></tr>
<tr><td rowspan="3">1</td><td rowspan="3">1. For Substances:

• L(E)C_{50} ≤ 1mg/L; and
• Lack the potential to rapidly biodegrade and/or have the potential to bioaccumulate (BCF≥ 500 or if absent log Kow ≥ 4).

where L(E)C_{50} is either fish 96hr LC_{50}, crustacea 48hr EC LC_{50} or aquatic plant 72 or 96hr ErC_{50}

2. For Mixtures, use bridging principles (see paragraphs 33-39).

3. If bridging principles do not apply,

• [Concentration of Chronic 1] x M > 25%
where M is a multiplying factor (see paragraph 56).

4. For mixtures with no usable information for one or more relevant ingredients, classify using the available information and add the statement: "x percent of the mixture consists of component(s) of unknown hazards to the aquatic environment".</td><td>Symbol</td><td>  </td></tr>
<tr><td>Signal word</td><td>Warning</td></tr>
<tr><td>Hazard statement</td><td>Very toxic to aquatic life with long lasting effects</td></tr>
<tr><td rowspan="3">2</td><td rowspan="3">1. For Substances:

• 1 mg/L < L(E)C_{50} ≤ 10 mg/L; and
• Lack the potential to rapidly biodegrade and/or have the potential to bioaccumulate (BCF≥ 500 or if absent log Kow ≥ 4); unless
• Chronic NOECs > 1mg/L

2. For Mixtures, use bridging (see paragraphs 33-39).

3. If bridging principles do not apply,

• [Concentration of Chronic 1] x M x 10
+ [Concentration of Chronic 2] > 25%
where M is a multiplying factor (see paragraph 56).

4. For mixtures with no usable information for one or more relevant ingredients, classify using the available information and add the statement: "x percent of the mixture consists of component(s) of unknown hazards to the aquatic environment".</td><td>Symbol</td><td>  </td></tr>
<tr><td>Signal word</td><td>No signal word</td></tr>
<tr><td>Hazard statement</td><td>Toxic to aquatic life with long lasting effects</td></tr>
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<tr><td rowspan="3">3</td><td rowspan="3">1. For Substances:

• 10 mg/L < L(E)C_{50} ≤ 100 mg/L; and
• Lack the potential to rapidly biodegrade and/or have the potential to bioaccumulate (BCF≥ 500 or if absent log Kow ≥ 4); unless
• Chronic NOECs > 1mg/L

2. For Mixtures, use bridging principles (see paragraphs 33-39).

3. If bridging principles do not apply,

• [Concentration of Chronic 1] x M x 100
+ [Concentration of Chronic 2] x 10
+ [Concentration of Chronic 3] > 25%
where M is a multiplying factor (see paragraph 56).

4. For mixtures with no usable information for one or more relevant ingredients, classify using the available information and add the statement: "x percent of the mixture consists of component(s) of unknown hazards to the aquatic environment".</td><td>Symbol</td><td>No symbol used</td></tr>
<tr><td>Signal word</td><td>No signal word</td></tr>
<tr><td>Hazard statement</td><td>Harmful to aquatic life with long lasting effects</td></tr>
<tr><td rowspan="3">4</td><td rowspan="3">1. For Substances:

• poorly soluble and no acute toxicity is observed up the water solubility
• Lack the potential to rapidly biodegrade and/or have the potential to bioaccumulate (BCF≥ 500 or if absent log Kow ≥ 4); unless
• Chronic NOECs > 1mg/L

2. For Mixtures, use bridging principles (see paragraphs 33-39).

3. If bridging principles do not apply,
• Sum of concentrations of components classified as Chronic 1, 2, 3 or 4 > 25%

4. For mixtures with no usable information for one or more relevant ingredients, classify using the available information and add the statement: "x percent of the mixture consists of component(s) of unknown hazards to the aquatic environment".</td><td>Symbol</td><td>No symbol used</td></tr>
<tr><td>Signal word</td><td>No signal word</td></tr>
<tr><td>Hazard statement</td><td>May cause long lasting harmful effects to aquatic life</td></tr>
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