Acute toxicity refers to those adverse effects occurring following oral or dermal administration of a single dose of a substance, or multiple doses given within 24 hours, or an inhalation exposure of 4 hours.

Substances can be allocated to one of four toxicity categories based on acute toxicity by the oral, dermal or inhalation route according to the numeric cut-off criteria as shown in Table A.1.1. Acute toxicity values are expressed as (approximate) LD50 (oral, dermal) or LC50 (inhalation) values or as acute toxicity estimates (ATE). See the footnotes following Table A.1.1 for further explanation on the application of these values.

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<table>
<thead>
<tr>
<th>Exposure route</th>
<th>Category 1</th>
<th>Category 2</th>
<th>Category 3</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oral</strong> (mg/kg bodyweight)</td>
<td>≤ 5</td>
<td>&gt;5 and ≤ 50</td>
<td>&gt;50 and ≤ 300</td>
<td>&gt;300 and ≤ 2000</td>
</tr>
<tr>
<td><strong>Dermal</strong> (mg/kg bodyweight)</td>
<td>≤ 50</td>
<td>&gt;50 and ≤ 200</td>
<td>&gt;200 and ≤ 1000</td>
<td>&gt;1000 and ≤ 2000</td>
</tr>
<tr>
<td><strong>Inhalation - Gases</strong> (ppmV)</td>
<td>≤ 100</td>
<td>&gt;100 and ≤ 500</td>
<td>&gt;500 and ≤ 2500</td>
<td>&gt;2500 and ≤ 20000</td>
</tr>
<tr>
<td><strong>Inhalation - Vapors</strong> (mg/l)</td>
<td>≤ 0.5</td>
<td>&gt;0.5 and ≤ 2.0</td>
<td>&gt;2.0 and ≤ 10.0</td>
<td>&gt;10.0 and ≤ 20.0</td>
</tr>
<tr>
<td><strong>Inhalation - Dusts and Mists</strong> (mg/l)</td>
<td>≤ 0.05</td>
<td>&gt;0.05 and ≤ 0.5</td>
<td>&gt;0.5 and ≤ 1.0</td>
<td>&gt;1.0 and ≤ 5.0</td>
</tr>
</tbody>
</table>

Note: Gas concentrations are expressed in parts per million per volume (ppmV).

**Notes to Table A.1.1:**
(a) The acute toxicity estimate (ATE) for the classification of a substance is derived using the LD50/LC50 where available;
(b) The acute toxicity estimate (ATE) for the classification of a substance or ingredient in a mixture is derived using:
   (i) the LD50/LC50 where available. Otherwise,
   (ii) the appropriate conversion value from Table 1.2 that relates to the results of a range test, or
   (iii) the appropriate conversion value from Table 1.2 that relates to a classification category;
(c) Inhalation cut-off values in the table are based on 4 hour testing exposures. Conversion of existing inhalation toxicity data which has been generated according to 1 hour exposure is achieved by dividing by a factor of 2 for gases and vapors and 4 for dusts and mists;
(d) For some substances the test atmosphere will be a vapor which consists of a combination of liquid and gaseous phases. For other substances the test atmosphere may consist of a vapor which is nearly all the gaseous phase. In these latter cases, classification is based on ppmV as follows: Category 1 (100 ppmV), Category 2 (500 ppmV), Category 3 (2500 ppmV), Category 4 (20000 ppmV).

The terms "dust", "mist" and "vapor" are defined as follows:
(i) Dust: solid particles of a substance or mixture suspended in a gas (usually air);
(ii) Mist: liquid droplets of a substance or mixture suspended in a gas (usually air);
(iii) Vapor: the gaseous form of a substance or mixture released from its liquid or solid state.