





**Toxicity:** Categories 1 and 2 considered to be **highly toxic** having acute toxicity.

Acute Toxicity	Category 1	Category 2	Category 3	Category 4	Category 5
Oral (mg/kg)	≤ 5	> 5 ≤ 50	> 50 ≤ 300	> 300 ≤ 2000	<b>Criteria:</b> <ul style="list-style-type: none"> <li>• Anticipated oral LD50 between 2000 and 5000 mg/kg;</li> <li>• Indication of significant effect in humans; *</li> <li>• Any mortality at class 4; *</li> <li>• Significant clinical signs at class 4; *</li> <li>• Indications from other studies. *</li> </ul> *If assignment to a more hazardous class is not warranted
Dermal (mg/kg)	≤ 50	> 50 ≤ 200	> 200 ≤ 1000	> 1000 ≤ 2000	
Gases (ppm)	≤ 100	> 100 ≤ 500	> 500 ≤ 2500	> 2500 ≤ 5000	
Oral (mg/l)	≤ 0.5	> 0.5 ≤ 2.0	> 2.0 ≤ 10	> 10 ≤ 20	
Oral (mg/l)	≤ 0.05	> 0.05 ≤ 0.5	> 0.5 ≤ 1.0	> 1.0 ≤ 5	

ACTUE ORAL TOXICITY – Annex 1					
	Category 1	Category 2	Category 3	Category 4	Category 5
<b>LD<sub>50</sub></b>	≤ 5 mg/kg	> 5 < 50 mg/kg	≥ 50 < 300 mg/kg	> 300 ≤ 2000 mg/kg	≥ 2000 and < 5000 mg/kg
<b>Pictogram</b>					No Symbol
<b>Signal Word</b>	Danger	Danger	Danger	Warning	Warning
<b>Hazard Statement</b>	Fatal if Swallowed	Fatal if Swallowed	Fatal if Swallowed	Harmful if Swallowed	May be harmful if Swallowed

**Skin Corrosion/Irritation:** considered to be reversible, corrosion is not. One typical characteristics of corrosive material is extreme pH like ≤2 or ≥ 11.5.

Skin Corrosion Category 1			Skin Irritation Category 2	Mild Skin Irritation Category 3
Destruction of dermal tissue: visible necrosis in at least one animal			Reversible adverse effects in dermal tissue	Reversible adverse effects in dermal tissue
Subcategory 1A Exposure < 3 min Observation < 1 hr.	Subcategory 1B Exposure < 3 min Observation < 14 days	Subcategory 1C Exposure < 4 hrs. Observation < 14 days	Draize Score: ≥ 2.3 < 4.0 or persistent information	Draize Score: ≥ 1.5 < 2.3



**Eye Effects:** Irritation considered to be reversible, serious damage is not. One typical characteristic of corrosive material is extreme pH like ≤2 or ≥ 11.5.

Category 1 Serious eye damage	Category 2 Eye Irritation
Irreversible damage 21 days after exposure  Draize score: Corneal opacity ≥ 3 Iritis ≥ 1.5	Reversible adverse effects on cornea, iris, conjunctiva  Draize score: Corneal opacity ≥ 1 Iritis ≥ 1 Redness ≥ 2 Chemosis ≥ 2
	Irritant Subcategory 2A Reversible in 21 days Mild Irritant Subcategory 2B Reversible in 7 days



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**Sensitizers:** Two categories and skin. Respiratory sensitizers induce hypersensitivity of the always following inhalation of the substance. Skin sensitizers (equivalent to contact sensitizers) induce an allergic response following skin contact.



Respiratory Sensitizer:



Skin Sensitizer:

### Germ Cell Mutagenicity (left table) and Carcinogenicity (right table)

Category 1 Known/Presumed		Category 2 Suspected/Possible
Known to produce heritable mutations in human germ cells		<ul style="list-style-type: none"> <li>• May induce heritable mutations in human germ cells</li> <li>• Positive evidence from tests in mammals and somatic cell tests</li> <li>• <i>In vivo</i> somatic genotoxicity supported by <i>in vitro</i> mutagenicity</li> </ul>
Subcategory 1A Positive evidence from epidemiological studies	Subcategory 1B Positive results in: <ul style="list-style-type: none"> <li>• <i>In vivo</i> heritable germ cell tests in mammals</li> <li>• Human germ cell tests</li> <li>• <i>In vivo</i> somatic mutagenicity tests, combined with some evidence of germ cell mutagenicity</li> </ul>	

Category 1 Known or Presumed Carcinogen		Category 2 Suspected Carcinogen
Subcategory 1A <b>Known or Human Carcinogen</b> Based on human evidence	Subcategory 1B Presumed Human Carcinogen Based on demonstrated animal carcinogenicity	Limited evidence of human or animal carcinogenicity



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### Reproductive toxicity

Category 1		Category 2 Suspected	Additional Category
Known or presumed to cause effects on human reproduction or on development		Human or animal evidence possibly with other information	Effects on or via lactation
Category 1A <b>Known</b> Based on human evidence	Category 1B <b>Presumed</b> Based on experimental animals		



### Acute and Chronic Aquatic Toxicology

Acute Cat. I Acute toxicity $\leq$ 1.00 mg/l	Acute Cat. II Acute toxicity $>$ 1.00 but $\leq$ 10.0 mg/l	Acute Cat. III Acute toxicity $>$ 10.0 but $<$ 100.0 mg/l	Chronic Cat. IV Acute toxicity $>$ 100 mg/l and lack of rapid degradability and $\log K_{ow} \geq 4$ unless BCF $<$ 500 and unless chronic toxicity $>$ 1 mg/l
Chronic Cat. I Acute toxicity $\leq$ 1.00 mg/ and lack of rapid degradability and $\log K_{ow} \geq 4$ unless BCF $<$ 500	Chronic Cat. II Acute toxicity $>$ 1.00 but $\leq$ 10.0 mg/l and lack of rapid degradability and $\log K_{ow} \geq 4$ unless BCF $<$ 500 and unless chronic toxicity $>$ 1 mg/l	Chronic Cat. III Acute toxicity $>$ 10.0 but $\leq$ 100 mg/l and lack of rapid degradability and $\log K_{ow} \geq 4$ unless BCF $<$ 500 and unless chronic toxicity $>$ 1 mg/l	

