

## 1 Identification

- **Product identifier**
- **Trade name:** Ultima Gold
- **Article number:** 6013329, 6013321, 6013323, 6013326, 6013327
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
PerkinElmer Health Sciences B.V.  
Rigaweg 22  
9723 TH Groningen  
The Netherlands  
Phone: 0031 50 5445900  
Fax: 0031 50 5445950  
www.perkinelmer.com
- **Information department:**  
Quality Assurance, Environment, Safety & Health (QA/ESH)  
SDS.Groningen@perkinelmer.com
- **Emergency telephone number:**  
+31 50 5445971  
CHEMTREC (within U.S.A. and Canada) 1-800-424-9300  
CHEMTREC (from outside U.S.A. and Canada) +1703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Repr. 2                      H361 Suspected of damaging fertility or the unborn child.  
Asp. Tox. 1                H304 May be fatal if swallowed and enters airways.



GHS05 Corrosion

Eye Dam. 1                H318 Causes serious eye damage.



GHS09 Environment

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2                H315 Causes skin irritation.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

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Trade name: *Ultima Gold*

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**Hazard pictograms**



GHS05 GHS08 GHS09

**Signal word** *Danger*

**Hazard-determining components of labeling:**

*Diisopropyl naphthalene isomers*  
*Diisooctyl acid phosphate*  
*2,2'-iminodiethanol*  
*Phosphoric acid, 2-ethylhexyl ester*

**Hazard statements**

*H315 Causes skin irritation.*  
*H318 Causes serious eye damage.*  
*H361 Suspected of damaging fertility or the unborn child.*  
*H304 May be fatal if swallowed and enters airways.*  
*H410 Very toxic to aquatic life with long lasting effects.*

**Precautionary statements**

*P280 Wear protective gloves/protective clothing/eye protection/face protection.*  
*P301+P310 If swallowed: Immediately call a poison center/doctor/2*  
*P302+P352 If on skin: Wash with plenty of water/2*  
*P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*  
*P332+P313 If skin irritation occurs: Get medical advice/attention.*  
*P362 Take off contaminated clothing.*

**Other hazards**

**Results of PBT and vPvB assessment**

**PBT:**

38640-62-9 | *Diisopropyl naphthalene isomers*

**vPvB:**

38640-62-9 | *Diisopropyl naphthalene isomers*

**3 Composition/information on ingredients**

**Chemical characterization: Mixtures**

**Description:** *Mixture of the substances listed below with nonhazardous additions.*

**Dangerous components:**

38640-62-9	<i>Diisopropyl naphthalene isomers</i> PBT; vPvB Asp. Tox. 1, H304 Aquatic Chronic 1, H410	60-80%
9016-45-9	<i>Alkylphenol Polyglycoether</i> Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2A, H319	10-20%
298-07-7	<i>Diisooctyl acid phosphate</i> Skin Corr. 1B, H314 Acute Tox. 4, H302	2.5-10%

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9016-45-9	Alkylphenol Polyglycoether <ul style="list-style-type: none"> <li> Eye Dam. 1, H318</li> <li> Aquatic Chronic 2, H411</li> <li> Acute Tox. 4, H302; Skin Irrit. 2, H315</li> </ul>	2.5-10%
12645-31-7	Phosphoric acid, 2-ethylhexyl ester <ul style="list-style-type: none"> <li> Flam. Liq. 3, H226</li> <li> Skin Corr. 1B, H314</li> </ul>	2.5-10%
111-42-2	2,2'-iminodiethanol <ul style="list-style-type: none"> <li> Carc. 2, H351; Repr. 2, H361; STOT RE 2, H373</li> <li> Eye Dam. 1, H318</li> <li> Acute Tox. 4, H302; Skin Irrit. 2, H315</li> </ul> Aquatic Chronic 3, H412	2.5-5%
577-11-7	Sodium dioctyl sulphosuccinate <ul style="list-style-type: none"> <li> Eye Dam. 1, H318</li> <li> Skin Irrit. 2, H315</li> </ul>	0-2.5%
78-40-0	Triethyl phosphate <ul style="list-style-type: none"> <li> Acute Tox. 4, H302; Eye Irrit. 2A, H319</li> </ul>	0-2.5%

· **Non-Dangerous components**

92-71-7	2,5-Diphenyloxazole (PPO)	0-2.5%
7732-18-5	water, distilled, conductivity or of similar purity	0-2.5%
13280-61-0	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	0-2.5%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

#### 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

#### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
Use fire fighting measures that suit the environment.  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear fully protective suit.

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## 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Keep people at a distance and stay upwind.

Ensure adequate ventilation

· **Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· **Protective Action Criteria for Chemicals**

· **PAC-1:**

38640-62-9	Diisopropyl naphthalene isomers	5.6 mg/m <sup>3</sup>
298-07-7	Diisooctyl acid phosphate	15 mg/m <sup>3</sup>
111-42-2	2,2'-iminodiethanol	3 mg/m <sup>3</sup>
577-11-7	Sodium dioctyl sulphosuccinate	5.7 mg/m <sup>3</sup>
78-40-0	Triethyl phosphate	23 mg/m <sup>3</sup>
92-71-7	2,5-Diphenyloxazole (PPO)	2.5 mg/m <sup>3</sup>
13280-61-0	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	12 mg/m <sup>3</sup>

· **PAC-2:**

38640-62-9	Diisopropyl naphthalene isomers	61 mg/m <sup>3</sup>
298-07-7	Diisooctyl acid phosphate	160 mg/m <sup>3</sup>
111-42-2	2,2'-iminodiethanol	28 mg/m <sup>3</sup>
577-11-7	Sodium dioctyl sulphosuccinate	63 mg/m <sup>3</sup>
78-40-0	Triethyl phosphate	250 mg/m <sup>3</sup>
92-71-7	2,5-Diphenyloxazole (PPO)	27 mg/m <sup>3</sup>
13280-61-0	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	130 mg/m <sup>3</sup>

· **PAC-3:**

38640-62-9	Diisopropyl naphthalene isomers	370 mg/m <sup>3</sup>
298-07-7	Diisooctyl acid phosphate	980 mg/m <sup>3</sup>
111-42-2	2,2'-iminodiethanol	130 mg/m <sup>3</sup>
577-11-7	Sodium dioctyl sulphosuccinate	380 mg/m <sup>3</sup>
78-40-0	Triethyl phosphate	320 mg/m <sup>3</sup>
92-71-7	2,5-Diphenyloxazole (PPO)	160 mg/m <sup>3</sup>
13280-61-0	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	790 mg/m <sup>3</sup>

## 7 Handling and storage

· **Handling:**

· **Precautions for safe handling** No special measures required.

· **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.

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- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
  - Protect from heat and direct sunlight.
  - Store receptacle in fume compartment.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - Keep away from foodstuffs, beverages and feed.
  - Immediately remove all soiled and contaminated clothing.
  - Wash hands before breaks and at the end of work.
  - Avoid contact with the skin.
  - Avoid contact with the eyes and skin.
- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Protection of hands:**



Protective gloves

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
    - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - **Penetration time of glove material**
    - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:

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Tightly sealed goggles

## 9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid  
Color: Colorless  
Odor: Characteristic

· pH-value at 20 °C (68 °F): 6

· Change in condition

Melting point/Melting range: Undetermined.  
Boiling point/Boiling range: 290 °C (554 °F)

· Flash point: 152 °C (305.6 °F)

· Ignition temperature: 500 °C (932 °F)

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Explosion limits:

Lower: 0.4 Vol %  
Upper: 4.7 Vol %

· Density at 20 °C (68 °F): 0.98 g/cm<sup>3</sup> (8.1781 lbs/gal)

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Solvent content:

VOC content: =<2.5 %

· Other information: No further relevant information available.

## 10 Stability and reactivity

· Reactivity: No further relevant information available.

· Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· Possibility of hazardous reactions: No dangerous reactions known.

· Conditions to avoid: No further relevant information available.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: Carbon monoxide

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## 11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

**ATE (Acute Toxicity Estimate)**

Oral	LD50	<3,171 mg/kg
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Dermal	LD50	18,169 mg/kg (rbt)
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**38640-62-9 Diisopropyl naphthalene isomers**

Oral	LD50	4,000 mg/kg (Rat)
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· **Primary irritant effect:**

· **on the skin:** Irritant to skin and mucous membranes.

· **on the eye:** Strong irritant with the danger of severe eye injury.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

111-42-2	2,2'-iminodiethanol	2B
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· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

**9016-45-9 Alkylphenol Polyglycoether**

chronic NOEC/ECx	>1 mg/l (Alge)
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**9016-45-9 Alkylphenol Polyglycoether**

chronic NOEC/ECx	>1 mg/l (Alge)
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· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:**

· **Remark:** Harmful to fish

· **Additional ecological information:**

· **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Harmful to aquatic organisms

(Contd. on page 8)



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· **Results of PBT and vPvB assessment**

· **PBT:**

38640-62-9 Diisopropyl naphthalene isomers

· **vPvB:**

38640-62-9 Diisopropyl naphthalene isomers

· **Other adverse effects** No further relevant information available.

**13 Disposal considerations**

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

· **UN-Number**

· **ADR, IMDG, IATA**

UN3082

· **UN proper shipping name**

· **ADR**

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycoether)

· **IMDG**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycoether), MARINE POLLUTANT

· **IATA**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycoether)

· **Transport hazard class(es)**

· **ADR**



· **Class**

9 (M6) Miscellaneous dangerous substances and articles

· **Label**

9

· **IMDG, IATA**



· **Class**

9 Miscellaneous dangerous substances and articles

· **Label**

9

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· <b>Packing group</b> · <b>ADR, IMDG, IATA</b>	<i>III</i>
· <b>Environmental hazards:</b> · <b>Marine pollutant:</b>	<i>Product contains environmentally hazardous substances: Diisopropyl naphthalene isomers Yes Symbol (fish and tree)</i>
· <b>Special marking (ADR):</b> · <b>Special marking (IATA):</b>	<i>Symbol (fish and tree) Symbol (fish and tree)</i>
· <b>Special precautions for user</b> · <b>Hazard identification number (Kemler code):</b> 90 · <b>EMS Number:</b>	<i>Warning: Miscellaneous dangerous substances and articles F-A,S-F</i>
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	<i>Not applicable.</i>
· <b>Transport/Additional information:</b> · <b>Remarks:</b>	<i>Not dangerous according to the above specifications. Special marking with the symbol (fish and tree).</i>
· <b>UN "Model Regulation":</b>	<i>UN3082, Environmentally hazardous substances, liquid, n.o.s. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycoether), 9, III</i>

**15 Regulatory information**

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
· **Sara**

· **Section 355 (extremely hazardous substances):**

*None of the ingredient is listed.*

· **Section 313 (Specific toxic chemical listings):**

*111-42-2 | 2,2'-iminodiethanol*

· **TSCA (Toxic Substances Control Act):**

<i>38640-62-9</i>	<i>Diisopropyl naphthalene isomers</i>	<i>ACTIVE</i>
<i>298-07-7</i>	<i>Diisooctyl acid phosphate</i>	<i>ACTIVE</i>
<i>111-42-2</i>	<i>2,2'-iminodiethanol</i>	<i>ACTIVE</i>
<i>577-11-7</i>	<i>Sodium dioctyl sulphosuccinate</i>	<i>ACTIVE</i>
<i>78-40-0</i>	<i>Triethyl phosphate</i>	<i>ACTIVE</i>
<i>92-71-7</i>	<i>2,5-Diphenyloxazole (PPO)</i>	<i>ACTIVE</i>
<i>7732-18-5</i>	<i>water, distilled, conductivity or of similar purity</i>	<i>ACTIVE</i>

· **Hazardous Air Pollutants**

*111-42-2 | 2,2'-iminodiethanol*

· **Proposition 65**

· **Chemicals known to cause cancer:**

*111-42-2 | 2,2'-iminodiethanol*

· **Chemicals known to cause reproductive toxicity for females:**

*None of the ingredients is listed.*

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Trade name: *Ultima Gold*

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· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

111-42-2 | 2,2'-iminodiethanol

A3

· **MAK (German Maximum Workplace Concentration)**

111-42-2 | 2,2'-iminodiethanol

0.46 ppm; 2 mg/m<sup>3</sup>

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS05 GHS08 GHS09

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

*Diisopropyl naphthalene isomers*  
*Diisooctyl acid phosphate*  
*2,2'-iminodiethanol*  
*Phosphoric acid, 2-ethylhexyl ester*

· **Hazard statements**

*H315 Causes skin irritation.*  
*H318 Causes serious eye damage.*  
*H361 Suspected of damaging fertility or the unborn child.*  
*H304 May be fatal if swallowed and enters airways.*  
*H410 Very toxic to aquatic life with long lasting effects.*

· **Precautionary statements**

*P280 Wear protective gloves/protective clothing/eye protection/face protection.*  
*P301+P310 If swallowed: Immediately call a poison center/doctor/2*  
*P302+P352 If on skin: Wash with plenty of water/2*  
*P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*  
*P332+P313 If skin irritation occurs: Get medical advice/attention.*  
*P362 Take off contaminated clothing.*

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
Water	≤2.5
NK	≤2.5

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**Trade name: Ultima Gold**

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· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

### · **Relevant phrases**

- H226 Flammable liquid and vapor.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H351 Suspected of causing cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

· **Department issuing SDS:** Quality Assurance, Environment, Safety & Health (QA/ESH)

· **Contact:** SDS.Groningen@perkinelmer.com

· **Date of preparation / last revision** 11/17/2020 / 16

### · **Abbreviations and acronyms:**

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- ICAO: International Civil Aviation Organisation
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- NIOSH: National Institute for Occupational Safety
- OSHA: Occupational Safety & Health
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- Flam. Liq. 3: Flammable liquids – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Corr. 1B: Skin corrosion/irritation – Category 1B
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
- Carc. 2: Carcinogenicity – Category 2
- Repr. 2: Reproductive toxicity – Category 2
- STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
- Asp. Tox. 1: Aspiration hazard – Category 1
- Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· **\* Data compared to the previous version altered.**