1 Identification

- **Product name:** Diamond Wafering Blades
- **Part number:**
  60-20065  -  60-20104
  60-10046  -  60-40080
- **Application of the substance / the mixture** Abrasive blade
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Allied High Tech Products Inc.
    2376 East Pacifica Place
    USA-RANCHO DOMINGUEZ, CA 90220
    USA
    info@alliedhightech.com
- **Information department:** Product safety department
- **Emergency telephone number:**
  During normal opening times: +1 (310) 635-2466
  Chemtrec: +1 (202) 483-7616

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - **GHS08 Health hazard**
    Resp. Sens. 1  H334  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
    Carc. 1B  H350  May cause cancer.
    Repr. 1A  H360-H362  May damage fertility or the unborn child. May cause harm to breast-fed children.
    STOT RE 1  H372  Causes damage to the gastro-intestinal tract through prolonged or repeated exposure.

  - **GHS09 Environment**
    Aquatic Chronic 2  H411  Toxic to aquatic life with long lasting effects.

  - **GHS07**
Product name: Diamond Wafering Blades

Skin Sens. 1   H317   May cause an allergic skin reaction.

Aquatic Acute 2   H401   Toxic to aquatic life.

· Label elements
  · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
  · Hazard pictograms
    
    GHS08   GHS09

· Signal word Danger

· Hazard-determining components of labeling:
  cobalt
  nickel
  lead
  tungsten carbide

· Hazard statements
  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  May cause an allergic skin reaction.
  May cause cancer.
  May damage fertility or the unborn child. May cause harm to breast-fed children.
  Causes damage to the gastro-intestinal tract through prolonged or repeated exposure.
  Toxic to aquatic life.
  Toxic to aquatic life with long lasting effects.

· Precautionary statements
  Obtain special instructions before use.
  Do not handle until all safety precautions have been read and understood.
  Do not breathe dusts or mists.
  Avoid contact during pregnancy/while nursing.
  Wash thoroughly after handling.
  Do not eat, drink or smoke when using this product.
  Contaminated work clothing must not be allowed out of the workplace.
  Avoid release to the environment.
  Wear protective gloves/protective clothing/eye protection/face protection.
  [In case of inadequate ventilation] wear respiratory protection.
  If on skin: Wash with plenty of water.
  If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
  IF exposed or concerned: Get medical advice/attention.
  Specific treatment (see on this label).
  Get medical advice/attention if you feel unwell.
  If skin irritation or rash occurs: Get medical advice/attention.
  If experiencing respiratory symptoms: Call a poison center/doctor.
  Wash contaminated clothing before reuse.
  Collect spillage.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:
  · NFPA ratings (scale 0 - 4)
    Health = 1
    Fire = 0
    Reactivity = 1
Product name: Diamond Wafering Blades

· HMIS-ratings (scale 0 - 4)

| HEALTH | 1 | Health = 1 |
| FIRE | 0 | Fire = 0 |
| REACTIVITY | 1 | Reactivity = 1 |

· Other hazards
· Results of PBT and vPvB assessment
  · PBT: Not applicable.
  · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures
· Description: Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Hazardous Components:</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-30-8 copper</td>
</tr>
<tr>
<td>7440-48-4 cobalt</td>
</tr>
<tr>
<td>7440-47-3 chromium</td>
</tr>
<tr>
<td>7440-33-7 tungsten</td>
</tr>
<tr>
<td>7440-02-0 nickel</td>
</tr>
<tr>
<td>7440-31-5 tin</td>
</tr>
<tr>
<td>12070-12-1 tungsten carbide</td>
</tr>
<tr>
<td>7439-92-1 lead</td>
</tr>
<tr>
<td>7439-89-6 iron</td>
</tr>
<tr>
<td>7782-40-3 Diamond</td>
</tr>
</tbody>
</table>

· Non-hazardous Components:

<table>
<thead>
<tr>
<th>Additional information:</th>
</tr>
</thead>
</table>

The diamond concentration stated is for the high concentration, diamond metal bond blades. The diamond concentration for the low concentration blades is between 0.1 -< 2.5%.

4 First-aid measures

· Description of first aid measures
· General information:
  Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· After inhalation:
  Supply fresh air and to be sure call for a doctor.
  In case of unconsciousness place patient stably in side position for transportation.
· After skin contact: Immediately wash with water and soap and rinse thoroughly.
· After eye contact: Rinse opened eye for several minutes under running water.
· After swallowing: If symptoms persist consult doctor.
5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture: No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Not required.
- Environmental precautions:
  Do not allow product to reach sewage system or any water course.
  Do not allow to enter sewers/surface or ground water.
  Inform respective authorities in case of seepage into water course or sewage system.
- Methods and material for containment and cleaning up:
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
- 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

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-89-6 iron</td>
<td>3.2 mg/m³</td>
</tr>
<tr>
<td>7440-50-8 copper</td>
<td>3 mg/m³</td>
</tr>
<tr>
<td>7440-48-4 cobalt</td>
<td>0.18 mg/m³</td>
</tr>
<tr>
<td>1314-13-2 zinc oxide</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>7440-33-7 tungsten</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>7440-02-0 nickel</td>
<td>4.5 mg/m³</td>
</tr>
<tr>
<td>7440-47-3 chromium</td>
<td>1.5 mg/m³</td>
</tr>
<tr>
<td>7440-31-5 tin</td>
<td>6 mg/m³</td>
</tr>
<tr>
<td>7782-40-3 Diamond</td>
<td>6.3 mg/m³</td>
</tr>
<tr>
<td>12070-12-1 tungsten carbide</td>
<td>11 mg/m³</td>
</tr>
<tr>
<td>7439-92-1 lead</td>
<td>0.15 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-2:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-89-6 iron</td>
<td>35 mg/m³</td>
</tr>
<tr>
<td>7440-50-8 copper</td>
<td>33 mg/m³</td>
</tr>
<tr>
<td>7440-48-4 cobalt</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td>1314-13-2 zinc oxide</td>
<td>15 mg/m³</td>
</tr>
<tr>
<td>7440-33-7 tungsten</td>
<td>330 mg/m³</td>
</tr>
<tr>
<td>7440-02-0 nickel</td>
<td>50 mg/m³</td>
</tr>
</tbody>
</table>
Product name: Diamond Wafering Blades

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Substance</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-47-3</td>
<td>chromium</td>
<td>17 mg/m³</td>
</tr>
<tr>
<td>7440-31-5</td>
<td>tin</td>
<td>67 mg/m³</td>
</tr>
<tr>
<td>7782-40-3</td>
<td>Diamond</td>
<td>69 mg/m³</td>
</tr>
<tr>
<td>12070-12-1</td>
<td>tungsten carbide</td>
<td>120 mg/m³</td>
</tr>
<tr>
<td>7439-92-1</td>
<td>lead</td>
<td>120 mg/m³</td>
</tr>
<tr>
<td>PAC-3:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7439-89-6</td>
<td>iron</td>
<td>150 mg/m³</td>
</tr>
<tr>
<td>7440-50-8</td>
<td>copper</td>
<td>200 mg/m³</td>
</tr>
<tr>
<td>7440-48-4</td>
<td>cobalt</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td>1314-13-2</td>
<td>zinc oxide</td>
<td>2,500 mg/m³</td>
</tr>
<tr>
<td>7440-33-7</td>
<td>tungsten</td>
<td>2,000 mg/m³</td>
</tr>
<tr>
<td>7440-02-0</td>
<td>nickel</td>
<td>99 mg/m³</td>
</tr>
<tr>
<td>7440-47-3</td>
<td>chromium</td>
<td>99 mg/m³</td>
</tr>
<tr>
<td>7440-31-5</td>
<td>tin</td>
<td>400 mg/m³</td>
</tr>
<tr>
<td>7782-40-3</td>
<td>Diamond</td>
<td>1,100 mg/m³</td>
</tr>
<tr>
<td>12070-12-1</td>
<td>tungsten carbide</td>
<td>730 mg/m³</td>
</tr>
<tr>
<td>7439-92-1</td>
<td>lead</td>
<td>700 mg/m³</td>
</tr>
</tbody>
</table>

### 7 Handling and storage

- **Handling:**
  - Precautions for safe handling: No special precautions are necessary if used correctly.
  - Information about protection against explosions and fires: No special measures required.

- **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: Store receptacle in a well ventilated area.
  - 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:**

    | CAS No.  | Substance          | Limit Value |
    |----------|--------------------|-------------|
    | 7440-50-8 | copper             |             |
    | PEL      | Long-term value: 1* 0.1** mg/m³ as Cu *dusts and mists; **fume |
    | REL      | Long-term value: 1* 0.1** mg/m³ as Cu *dusts and mists; **fume |
    | TLV      | Long-term value: 1* 0.2** mg/m³ as Cu *dusts and mists; **fume; as Cu |
### Product name: Diamond Wafering Blades

<table>
<thead>
<tr>
<th>Chemical</th>
<th>PEL Long-term value</th>
<th>REL Long-term value</th>
<th>TLV Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7440-48-4 cobalt</strong></td>
<td>0.1* mg/m³ as Co; *for metal dust and fume</td>
<td>0.05 mg/m³ as Co; metal dust &amp; fume</td>
<td>(0.02) NIC-0.02* mg/m³ *inha. fraction; NIC-Skin, DSEN, RSEN, BEI</td>
</tr>
<tr>
<td><strong>1314-13-2 zinc oxide</strong></td>
<td>15* 5** mg/m³ *total dust **respirable fraction and fume</td>
<td>5 mg/m³ *dust only **fume</td>
<td>10* mg/m³ *as respirable fraction</td>
</tr>
<tr>
<td><strong>7440-33-7 tungsten</strong></td>
<td>and insoluble compounds, as We</td>
<td>10 mg/m³ as W</td>
<td>10* mg/m³ *as respirable fraction</td>
</tr>
<tr>
<td><strong>7440-02-0 nickel</strong></td>
<td>1 mg/m³</td>
<td>0.015 mg/m³ as Ni; See Pocket Guide App. A</td>
<td>1.5* mg/m³ elemental, *inha. fraction</td>
</tr>
<tr>
<td><strong>7440-47-3 chromium</strong></td>
<td>1 mg/m³</td>
<td>0.5* mg/m³ *metal+inorg.compds.as Cr;See Pocket Guide App. C</td>
<td>0.003* 0.5** mg/m³ inh. fraction, *as Cr(III),**metal</td>
</tr>
<tr>
<td><strong>7440-31-5 tin</strong></td>
<td>2 mg/m³ metal</td>
<td>2 mg/m³ metal</td>
<td>2 mg/m³ metal</td>
</tr>
<tr>
<td><strong>12070-12-1 tungsten carbide</strong></td>
<td>10 mg/m³ as W</td>
<td>5 mg/m³ as W</td>
<td></td>
</tr>
</tbody>
</table>
### Product name: Diamond Wafering Blades

| TLV | Long-term value: 3* mg/m³  
as W; * respirable fraction |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7439-92-1 lead</strong></td>
<td></td>
</tr>
</tbody>
</table>
| PEL | Long-term value: 0.05* mg/m³  
*see 29 CFR 1910.1025 |
| REL | Long-term value: 0.05* mg/m³  
*8-hr TWA ;See PocketGuide App.C |
| TLV | Long-term value: 0.05* mg/m³  
*and inorganic compounds, as Pb; BEI |

#### Ingredients with biological limit values:

<table>
<thead>
<tr>
<th>7440-48-4 cobalt</th>
</tr>
</thead>
</table>
| **BEI** | 15 µg/L  
Medium: urine  
Time: end of shift at end of workweek  
Parameter: Cobalt (background) |
| | 1 µg/L  
Medium: blood  
Time: end of shift at end of workweek  
Parameter: Cobalt (background, semi-quantitative) |

<table>
<thead>
<tr>
<th>7439-92-1 lead</th>
</tr>
</thead>
</table>
| **BEI** | 30 µg/100 ml  
Medium: blood  
Time: not critical  
Parameter: Lead |
| | 10 µg/100 ml  
Medium: blood  
Time: not critical  
Parameter: Lead (women of child bearing potential) |

**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.
Store protective clothing separately.

**Breathing equipment:** Use suitable respiratory protective device when high concentrations are present.

**Protection of hands:**
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

**Protective gloves**

**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.
**Product name: Diamond Wafering Blades**

- **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.
- **Eye protection:**
  
  ![Tightly sealed goggles](image)

---

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
  - **Appearance:**
    - Form: Solid
    - Color: According to product specification
  - **Odor:** Odorless
  - **Odor threshold:** Not determined.
  - **pH-value:** Not applicable.
- **Change in condition**
  - **Melting point/Melting range:** Undetermined.
  - **Boiling point/Boiling range:** Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not determined.
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower: Not determined.
  - Upper: Not determined.
- **Vapor pressure:** Not applicable.
- **Density:** Not determined.
- **Relative density:** Not determined.
- **Vapor density:** Not applicable.
- **Evaporation rate:** Not applicable.
- **Solubility in / Miscibility with**
  - **Water:** Insoluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - **Dynamic:** Not applicable.
  - **Kinematic:** Not applicable.
- **Solvent content:**
  - **VOC content:** 0.00 %
  - 0.0 g/l / 0.00 lb/gl
10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**: No decomposition if used according to specifications.
- **Possibility of hazardous reactions**: No dangerous reactions known.
- **Conditions to avoid**:
  - Keep away from heat.
  - Keep away from sources of ignition - No smoking.
  - Keep away from open flames. - No smoking.
- **Incompatible materials**: No further relevant information available.
- **Hazardous decomposition products**: No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**:
  - **LD/LC50 values that are relevant for classification**:
    - **ATE (Acute Toxicity Estimate)**
      - Oral LD50: 14,601 mg/kg
      - Inhalative LC50/4 h: 74.5 mg/l (rat)
    - **7440-48-4 cobalt**
      - Oral LD50: 6,170 mg/kg (rat)
    - **1314-13-2 zinc oxide**
      - Oral LD50: >5,000 mg/kg (rat)
    - **7440-02-0 nickel**
      - Dermal LD50: 5,010 mg/kg (rat)
      - Inhalative LC50/4 h: 2.55 mg/l (rat)
    - **7439-92-1 lead**
      - Oral LD50: 100 mg/kg (ATE)
      - Inhalative LC50/4 h: 1.5 mg/l (ATE)

- **Primary chemical irritant effect**:
  - **on the skin**: No irritant effect.
  - **on the eye**: No irritating effect.

- **Sensitization**:
  - Sensitization possible through inhalation.
  - Sensitization possible through skin contact.

- **Additional toxicological information**:
  - Abrasive eye irritant
  - Abrasive skin irritant
Carcinogenic categories

- IARC (International Agency for Research on Cancer)
  - 7440-48-4 cobalt 2B
  - 7440-02-0 nickel 2B
  - 7440-47-3 chromium 3
  - 12070-12-1 tungsten carbide 2A
  - 7439-92-1 lead 2B

- NTP (National Toxicology Program)
  - 7440-48-4 cobalt R
  - 7440-02-0 nickel R
  - 7439-92-1 lead R

- OSHA-Ca (Occupational Safety & Health Administration)
  None of the ingredients is listed.

### 12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
- 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: Toxic for fish
- Additional ecological information:
- General notes:
  - Water hazard class 2 (Self-assessment): hazardous for water
  - Do not allow product to reach ground water, water course or sewage system.
  - Danger to drinking water if even small quantities leak into the ground.
  - Also poisonous for fish and plankton in water bodies.
  - Toxic for aquatic organisms
- Results of PBT and vPvB assessment:
  - PBT: Not applicable.
  - vPvB: Not applicable.
- Other adverse effects: No further relevant information available.

### 13 Disposal considerations

- Waste treatment methods
  - Recommendation: Contact waste processors for recycling information.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.
14 Transport information

- **UN-Number**
  - **DOT, ADN, IMDG, IATA** 
    - not regulated  

- **UN proper shipping name**
  - **DOT, ADN, IMDG, IATA** 
    - not regulated  

- **Transport hazard class(es)**
  - **DOT, IMDG, IATA**
    - **Class** 
      - not regulated  
    - **Label**
      - -  
    - **ADN/R Class:**
      - not regulated  

- **Packing group**
  - **DOT, IMDG, IATA** 
    - not regulated  

- **Environmental hazards:**
  - **Marine pollutant:**
    - No  
    - Yes (DOT)  

- **Special precautions for user**
  - Not applicable.  

- **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
  - Not applicable.  

- **UN "Model Regulation":**
  - not regulated  

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**
    - **Section 355 (extremely hazardous substances):**
      - None of the ingredients is listed.  
    - **Section 313 (Specific toxic chemical listings):**
      - 7440-30-8 copper  
      - 7440-48-4 cobalt  
      - 1314-13-2 zinc oxide  
      - 7440-02-0 nickel  
      - 7440-47-3 chromium  
      - 7439-92-1 lead  
    - **TSCA (Toxic Substances Control Act):**
      - All ingredients are listed.  
    - **TSCA new (21st Century Act) (Substances not listed)**
      - 7782-40-3 Diamond  
    - **Proposition 65**
      - **Chemicals known to cause cancer:**
        - 7440-48-4 cobalt  
        - 7440-02-0 nickel  
        - 7439-92-1 lead  

(Contd. on page 12)
### Product name: Diamond Wafering Blades

<table>
<thead>
<tr>
<th>Chemicals known to cause reproductive toxicity for females:</th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-92-1 lead</td>
</tr>
<tr>
<td>Chemistries known to cause reproductive toxicity for males:</td>
</tr>
<tr>
<td>7439-92-1 lead</td>
</tr>
<tr>
<td>Chemicals known to cause developmental toxicity:</td>
</tr>
<tr>
<td>7439-92-1 lead</td>
</tr>
</tbody>
</table>

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

### Additional Information

**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.

- **Department issuing SDS:** Environment protection department.
- **Contact:** Kim Dermitt
- **Date of preparation / last revision:** 06/12/2018 / -
- **Abbreviations and acronyms:**
  - 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
  - DOT: US Department of Transportation
  - 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)
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent

(Contd. on page 13)
Product name: Diamond Wafering Blades

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
BEI: Biological Exposure Limit
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 1B: Carcinogenicity – Category 1B
Carc. 2: Carcinogenicity – Category 2
Carc. 2: Carcinogenicity – Category 2
Repr. 1A: Reproductive toxicity – Category 1A
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2
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 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4