1 Identification

- **Product name:** CBN Wafering Blades
- **Part number:**
  60-20071 - 60-20087
  60-30005 - 60-30020
  60-10046, 60-30075, 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.
    - Muta. 2 H341 Suspected of causing genetic defects.
    - Carc. 2 H351 Suspected of causing cancer.
    - Repr. 1A H360 May damage fertility or the unborn child.
    - 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**
    - Skin Sens. 1 H317 May cause an allergic skin reaction.
    - Aquatic Acute 2 H401 Toxic to aquatic life.
Safety Data Sheet  
acc. to OSHA HCS

Printing date 04/30/2020  
Version 4.0  
Last revision 04/30/2020

Product name: CBN Wafering Blades

(Contd. of page 1)

· Additional information:
Based on health effects for dust
Classification may change depending on the exact product composition.
All components listed for this product are bound within the product. When handled as intended and under normal conditions of use, there is
no evidence that any of the ingredients are released in amounts that pose a significant health risk.

(Contd. of page 1)

· 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 powder (particle diameter < 1 mm)
lead

· Hazard statements
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Suspected of causing genetic defects.
Suspected of causing cancer.
May damage fertility or the unborn child.
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 dust/fume/gas/mist/vapors/spray.
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 = 0
Fire = 0
Reactivity = 0

(Contd. on page 3)
Product name: CBN Wafering Blades

· HMIS-ratings (scale 0 - 4)

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FIRE</th>
<th>REACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Health = *0
Fire = 0
Reactivity = 0

· 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>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>409-21-2 silicon carbide</td>
<td>25-50%</td>
</tr>
<tr>
<td>1314-13-2 zinc oxide</td>
<td>≥2.5-&lt;10%</td>
</tr>
<tr>
<td>Aquatic Acute 1, H400; Aquatic Chronic 1, H410</td>
<td></td>
</tr>
<tr>
<td>7440-33-7 tungsten</td>
<td>1-10%</td>
</tr>
<tr>
<td>7440-47-3 chromium</td>
<td>1-10%</td>
</tr>
<tr>
<td>7440-48-4 cobalt</td>
<td>1-10%</td>
</tr>
<tr>
<td>Resp. Sens. 1, H334; Muta. 2, H341; Carc. 1B, H350; Repr. 1B, H360; Skin Sens. 1, H317; Aquatic Chronic 4, H413</td>
<td></td>
</tr>
<tr>
<td>7440-02-0 nickel powder (particle diameter &lt; 1 mm)</td>
<td>≥2.5-&lt;10%</td>
</tr>
<tr>
<td>Carc. 2, H351; STOT RE 1, H372; Skin Sens. 1, H317; Aquatic Chronic 3, H412</td>
<td></td>
</tr>
<tr>
<td>7440-21-3 silicon</td>
<td>1-10%</td>
</tr>
<tr>
<td>Flam. Sol. 2, H228</td>
<td></td>
</tr>
<tr>
<td>7440-50-8 copper</td>
<td>1-10%</td>
</tr>
<tr>
<td>7439-92-1 lead</td>
<td>0.1-&lt;1%</td>
</tr>
<tr>
<td>Carc. 2, H351; Repr. 1A, H360</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-hazardous Components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-89-6 iron</td>
<td>50-100%</td>
</tr>
<tr>
<td>9003-35-4 Phenolic Polymer</td>
<td>25-50%</td>
</tr>
<tr>
<td>10043-11-5 boron nitride</td>
<td>≤1%</td>
</tr>
</tbody>
</table>

· Additional information: Product may contain many or all of the above ingredients of varying hazardous composition.

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.

· 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.
Product name: CBN Wafering Blades

- Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.
- Advice for firefighters
  - Protective equipment: Mouth respiratory protective device.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Mount respiratory protective device.
- **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>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-89-6</td>
<td>iron</td>
<td>3.2 mg/m³</td>
</tr>
<tr>
<td>409-21-2</td>
<td>silicon carbide</td>
<td>45 mg/m³</td>
</tr>
<tr>
<td>1314-13-2</td>
<td>zinc oxide</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>7440-33-7</td>
<td>tungsten</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>7440-47-3</td>
<td>chromium</td>
<td>1.5 mg/m³</td>
</tr>
<tr>
<td>7440-48-4</td>
<td>cobalt</td>
<td>0.18 mg/m³</td>
</tr>
<tr>
<td>7440-02-0</td>
<td>nickel powder (particle diameter &lt; 1 mm)</td>
<td>4.5 mg/m³</td>
</tr>
<tr>
<td>7440-21-3</td>
<td>silicon</td>
<td>45 mg/m³</td>
</tr>
<tr>
<td>7440-50-8</td>
<td>copper</td>
<td>3 mg/m³</td>
</tr>
<tr>
<td>7439-92-1</td>
<td>lead</td>
<td>0.15 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-89-6</td>
<td>iron</td>
<td>35 mg/m³</td>
</tr>
<tr>
<td>409-21-2</td>
<td>silicon carbide</td>
<td>500 mg/m³</td>
</tr>
<tr>
<td>1314-13-2</td>
<td>zinc oxide</td>
<td>15 mg/m³</td>
</tr>
<tr>
<td>7440-33-7</td>
<td>tungsten</td>
<td>330 mg/m³</td>
</tr>
<tr>
<td>7440-47-3</td>
<td>chromium</td>
<td>17 mg/m³</td>
</tr>
<tr>
<td>7440-48-4</td>
<td>cobalt</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td>7440-02-0</td>
<td>nickel powder (particle diameter &lt; 1 mm)</td>
<td>50 mg/m³</td>
</tr>
<tr>
<td>7440-21-3</td>
<td>silicon</td>
<td>100 mg/m³</td>
</tr>
<tr>
<td>7440-50-8</td>
<td>copper</td>
<td>33 mg/m³</td>
</tr>
<tr>
<td>7439-92-1</td>
<td>lead</td>
<td>120 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-89-6</td>
<td>iron</td>
<td>150 mg/m³</td>
</tr>
<tr>
<td>409-21-2</td>
<td>silicon carbide</td>
<td>3,000 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>7440-47-3</td>
<td>chromium</td>
<td>99 mg/m³</td>
</tr>
<tr>
<td>7440-48-4</td>
<td>cobalt</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td>7440-02-0</td>
<td>nickel powder (particle diameter &lt; 1 mm)</td>
<td>99 mg/m³</td>
</tr>
</tbody>
</table>

(Contd. on page 5)
Product name: CBN Wafering Blades

<table>
<thead>
<tr>
<th>Material</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-21-3 silicon</td>
<td>630 mg/m³</td>
</tr>
<tr>
<td>7440-50-8 copper</td>
<td>200 mg/m³</td>
</tr>
<tr>
<td>7439-92-1 lead</td>
<td>700 mg/m³</td>
</tr>
</tbody>
</table>

### 7 Handling and storage

- **Handling:**
  - **Precautions for safe handling** Open and handle receptacle with care.
  - **Information about protection against explosions and fires:** Keep respiratory protective device available.

- **Conditions for safe storage, including any incompatibilities**

- **Storage:**
  - **Requirements to be met by storerooms and receptacles:**
    - Store in a cool location.
    - No special requirements.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:**
    - Keep receptacle tightly sealed.
    - 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:**

  **409-21-2 silicon carbide**

<table>
<thead>
<tr>
<th>PEL</th>
<th>Long-term value: 15* 5** mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL</td>
<td>Long-term value: 10* 5** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>TLV</td>
<td>Long-term value: 10* 3** mg/m³</td>
</tr>
<tr>
<td></td>
<td>fibrous dust:0.1 f/cc; nonfibrous:*inh..**resp.</td>
</tr>
</tbody>
</table>

  **1314-13-2 zinc oxide**

<table>
<thead>
<tr>
<th>PEL</th>
<th>Long-term value: 15* 5** mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL</td>
<td>Short-term value: 10** mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 5 mg/m³</td>
</tr>
<tr>
<td></td>
<td>*dust only **fume</td>
</tr>
<tr>
<td>TLV</td>
<td>Short-term value: 10* mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 2* mg/m³</td>
</tr>
<tr>
<td></td>
<td>*as respirable fraction</td>
</tr>
</tbody>
</table>

  **7440-33-7 tungsten**

<table>
<thead>
<tr>
<th>PEL</th>
<th>and insoluble compounds, as We</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL</td>
<td>Short-term value: 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 5 mg/m³</td>
</tr>
<tr>
<td></td>
<td>as W</td>
</tr>
<tr>
<td>TLV</td>
<td>Long-term value: 3* mg/m³</td>
</tr>
<tr>
<td></td>
<td>as W; * respirable fraction</td>
</tr>
</tbody>
</table>

  **7440-47-3 chromium**

  | PEL | Long-term value: 1 mg/m³ |

(Contd. on page 6)
Product name: CBN Wafering Blades

| REL | Long-term value: 0.5* mg/m³  
*metal+inorg.compds.as Cr |
|-----|-------------------------------|
| TLV | Long-term value: 0.003* 0.5** mg/m³  
Inh. fraction, *as Cr(III),**metal |

7440-48-4 cobalt

| PEL  | Long-term value: 0.1* mg/m³  
As Co; *for metal dust and fume |
|------|-------------------------------|
| REL  | Long-term value: 0.05 mg/m³  
As Co; metal dust & fume |
| TLV  | Long-term value: 0.02* mg/m³  
*Inh. fraction; DSEN, RSEN, BEI |

7440-02-0 nickel powder (particle diameter < 1 mm)

<table>
<thead>
<tr>
<th>PEL</th>
<th>Long-term value: 1 mg/m³</th>
</tr>
</thead>
</table>
| REL  | Long-term value: 0.015 mg/m³  
As Ni |
| TLV  | Long-term value: 1.5* mg/m³  
Elemental, *inhalable fraction |

7440-21-3 silicon

| PEL  | Long-term value: 15* 5** mg/m³  
*Total dust **respirable fraction |
|------|-------------------------------|
| REL  | Long-term value: 10* 5** mg/m³  
*Total dust **respirable fraction |
| TLV  | TLV withdrawn |

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  
*Dusts and mists; **fume; as Cu |

7439-92-1 lead

| PEL  | Long-term value: 0.05* mg/m³  
*See 29 CFR 1910.1025 |
|------|-------------------------------|
| REL  | Long-term value: 0.05* mg/m³  
*8-hr TWA |
| TLV  | Long-term value: 0.05* mg/m³  
*And inorganic compounds, as Pb; BEI |

**Ingredients with biological limit values:**

7440-48-4 cobalt

| 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) |
Product name: CBN Wafering Blades

<table>
<thead>
<tr>
<th>7439-92-1 lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE1 30 µg/100 ml</td>
</tr>
<tr>
<td>Medium: blood</td>
</tr>
<tr>
<td>Time: not critical</td>
</tr>
<tr>
<td>Parameter: Lead</td>
</tr>
<tr>
<td>10 µg/100 ml</td>
</tr>
<tr>
<td>Medium: blood</td>
</tr>
<tr>
<td>Time: not critical</td>
</tr>
<tr>
<td>Parameter: Lead (women of child bearing potential)</td>
</tr>
</tbody>
</table>

- **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](image)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
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.
- **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.

(Contd. on page 8)
# Safety Data Sheet

**acc. to OSHA HCS**

**Printing date 04/30/2020**

**Version 4.0**

**Last revision 04/30/2020**

**Product name: CBN Wafering Blades**

## 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**
  - Freezing conditions
  - 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:**

<table>
<thead>
<tr>
<th>LD/LC50 values that are relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE (Acute Toxicity Estimate)</td>
</tr>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>Dermal</td>
</tr>
</tbody>
</table>

### 409-21-2 silicon carbide

| Oral | LD50 | 2,010 mg/kg (rat) |
| Dermal | LD50 | 2,010 mg/kg (rat) |
Product name: CBN Wafering Blades

<table>
<thead>
<tr>
<th></th>
<th>Oral LD50</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1314-13-2 zinc oxide</td>
<td>&gt;5,000 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>7440-48-4 cobalt</td>
<td>6,170 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>7440-02-0 nickel powder (particle diameter &lt; 1 mm)</td>
<td>5,010 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>7440-21-3 silicon</td>
<td>3,160 mg/kg (rat)</td>
<td></td>
</tr>
</tbody>
</table>

- **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)**
  - 409-21-2 silicon carbide: 2A
  - 7440-47-3 chromium: 3
  - 7440-48-4 cobalt: 2B
  - 7440-02-0 nickel powder (particle diameter < 1 mm): 2B
  - 7439-92-1 lead: 2B

- **NTP (National Toxicology Program)**
  - 7440-48-4 cobalt: R
  - 7440-02-0 nickel powder (particle diameter < 1 mm): 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.

(Contd. on page 10)
Product name: CBN Wafering Blades

**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**

<table>
<thead>
<tr>
<th><strong>UN-Number</strong></th>
<th>not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT, ADN, IATA</td>
<td>UN-</td>
</tr>
<tr>
<td>IMDG</td>
<td></td>
</tr>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td>not regulated</td>
</tr>
<tr>
<td>DOT, ADN, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td><strong>Transport hazard class(es)</strong></td>
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</tr>
<tr>
<td>DOT, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>not regulated</td>
</tr>
<tr>
<td>Label</td>
<td>-</td>
</tr>
<tr>
<td>ADN/R Class:</td>
<td>not regulated</td>
</tr>
<tr>
<td><strong>Packing group</strong></td>
<td>not regulated</td>
</tr>
<tr>
<td>DOT, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental hazards:</strong></td>
<td>No (DOT)</td>
</tr>
<tr>
<td><strong>Marine pollutant:</strong></td>
<td>Yes (DOT)</td>
</tr>
<tr>
<td><strong>Special precautions for user</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>UN &quot;Model Regulation&quot;:</strong></td>
<td>not regulated</td>
</tr>
</tbody>
</table>

**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):**
    - 1314-13-2 zinc oxide
    - 7440-47-3 chromium
    - 7440-48-4 cobalt
    - 7440-02-0 nickel powder (particle diameter < 1 mm)
    - 7440-50-8 copper
    - 7439-92-1 lead

  - **TSCA (Toxic Substances Control Act):**
    - All components have the value ACTIVE.

  - **Hazardous Air Pollutants**
    - 7440-48-4 cobalt
    - 7439-92-1 lead

(Contd. on page 11)


**Product name: CBN Wafering Blades**

### Proposition 65

- **Chemicals known to cause cancer:**
  - 7440-48-4 cobalt
  - 7440-02-0 nickel powder (particle diameter < 1 mm)
  - 7439-92-1 lead

- **Chemicals known to cause reproductive toxicity for females:**
  - 7439-92-1 lead

- **Chemicals known to cause reproductive toxicity for males:**
  - 7439-92-1 lead

- **Chemicals known to cause developmental toxicity:**
  - 7439-92-1 lead

### Carcinogenic categories

- **EPA (Environmental Protection Agency)**
  - 1314-13-2 zinc oxide: D, I, II
  - 7440-47-3 chromium: D
  - 7440-50-8 copper: D
  - 7439-92-1 lead: B2
  - 10043-11-5 boron nitride: I (oral)

- **TLV (Threshold Limit Value established by ACGIH)**
  - 409-21-2 silicon carbide: A2
  - 7440-47-3 chromium: A4
  - 7440-48-4 cobalt: A3
  - 7440-02-0 nickel powder (particle diameter < 1 mm): A5
  - 7439-92-1 lead: A3

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  - 7440-02-0 nickel powder (particle diameter < 1 mm)

### National regulations:

- Additional classification according to Decree on Hazardous Materials: Carcinogenic hazardous material group III (dangerous).
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 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 Dermit
- **Last revision:** 04/30/2020 / 3.0
- **Abbreviations and acronyms:**
  - 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
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety

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

OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEE: Biological Exposure Limit
Flam. Sol. 2: Flammable solids – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Muta. 2: Germ cell mutagenicity – Category 2
Carc. 1B: Carcinogenicity – Category 1B
Carc. 2: Carcinogenicity – Category 2
Repr. 1A: Reproductive toxicity – Category 1A
Repr. 1B: Reproductive toxicity – Category 1B
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 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3
Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4