1 Identification

· Product name: Aluminum Oxide Cut-Off & Wafering Blades, Rubber Bond

· Part number:
  80-10001 - 80-10025
  80-30000 - 80-30035
  80-40000 - 80-40040
  80-50000 - 80-50040

· 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

![GHS07]

Skin Irrit. 2  H315  Causes skin irritation.
Eye Irrit. 2B  H320  Causes eye irritation.
Aquatic Acute 3  H402  Harmful to aquatic life.
Aquatic Chronic 3  H412  Harmful to aquatic life with long lasting effects.

· Additional information: Classification may change depending on the exact product composition.

· Label elements

· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
Product name: Aluminum Oxide Cut-Off & Wafering Blades, Rubber Bond

· Hazard pictograms

GHS07

· Signal word Warning

· Hazard statements

Causes skin and eye irritation.
Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.

· Precautionary statements

Wash thoroughly after handling.
Avoid release to the environment.
Wear protective gloves.
If on skin: Wash with plenty of water.
Specific treatment (see on this label).
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
If eye irritation persists: Get medical advice/attention.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:

· NFPA ratings (scale 0 - 4)

Health = 1
Fire = 0
Reactivity = 0

· HMIS-ratings (scale 0 - 4)

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FIRE</th>
<th>REACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Health = 1
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.

· Hazardous Components:

<table>
<thead>
<tr>
<th>Substance ID</th>
<th>Description</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1344-28-1</td>
<td>aluminium oxide</td>
<td>25-50%</td>
</tr>
<tr>
<td>9006-04-6</td>
<td>Natural rubber latex</td>
<td>10-&lt;25%</td>
</tr>
<tr>
<td>13397-24-5</td>
<td>Gypsum (Calcium sulfate)</td>
<td>10-&lt;25%</td>
</tr>
<tr>
<td>1309-37-1</td>
<td>diiron trioxide</td>
<td>10-&lt;25%</td>
</tr>
</tbody>
</table>

(Contd. on page 3)
## Product Name: Aluminum Oxide Cut-Off & Wafering Blades, Rubber Bond

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Name</th>
<th>Concentration</th>
<th>Health Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>60304-36-1</td>
<td>Potassium aluminum fluoride</td>
<td>10-&lt;25%</td>
<td>Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320</td>
</tr>
<tr>
<td>7704-34-9</td>
<td>sulfur</td>
<td>2.5-&lt;10%</td>
<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td>471-34-1</td>
<td>calcium carbonate</td>
<td>2.5-&lt;10%</td>
<td></td>
</tr>
<tr>
<td>1314-13-2</td>
<td>zinc oxide</td>
<td>0.1-≤2.5%</td>
<td>Aquatic Acute 1, H400; Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

### Additional Information

Product may contain any or all of the above ingredients of varying hazardous composition.

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## 4 First-aid Measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** 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. If symptoms persist, 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.

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## 5 Fire-fighting Measures

- **Extinguishing media**
  - Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters**
  - Protective equipment: No special measures required.

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## 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:**
  - Pick up mechanically.
  - Dispose contaminated material as waste according to item 13.
- **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.
7 Handling and storage

- Handling:
- Precautions for safe handling Any deposit of dust which cannot be avoided must be regularly removed.
- 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: Store away from foodstuffs.
- Further information about storage conditions: Keep receptacle tightly sealed.
- 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 following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.
At this time, the other constituents have no known exposure limits.

### 1344-28-1 aluminium oxide

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
<td>Long-term value: 15*, 5** mg/m³</td>
</tr>
<tr>
<td>REL</td>
<td>Long-term value: 10*, 5** mg/m³</td>
</tr>
<tr>
<td>TLV</td>
<td>Long-term value: 1* mg/m³</td>
</tr>
</tbody>
</table>

*Total dust; **Respirable fraction

### 9006-04-6 Natural rubber latex

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLV</td>
<td>Long-term value: 0.0001* mg/m³</td>
</tr>
</tbody>
</table>

Skin; DSEN, RSEN;* inh. fraction

### 13397-24-5 Gypsum (Calcium sulfate)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL</td>
<td>Long-term value: 10*, 5** mg/m³</td>
</tr>
</tbody>
</table>

*Total dust; **Respirable fraction

### 130937-1 diiron trioxide

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
<td>Long-term value: 10* 15**, 5*** mg/m³</td>
</tr>
<tr>
<td>REL</td>
<td>Long-term value: 5 mg/m³</td>
</tr>
<tr>
<td>TLV</td>
<td>Long-term value: 5* mg/m³</td>
</tr>
</tbody>
</table>

*Dust & fume, as Fe

### 60304-36-1 Potassium aluminum fluoride

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLV</td>
<td>Long-term value: 5** mg/m³</td>
</tr>
</tbody>
</table>

**Respiratory fraction and fume
## 471-34-1 Calcium Carbonate

<table>
<thead>
<tr>
<th>PEL</th>
<th>Long-term value: 15* 5** mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<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>TLV withdrawn</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></td>
<td>*total dust **respirable fraction and fume</td>
</tr>
<tr>
<td>REL</td>
<td>Short-term value: 10** mg/m³</td>
</tr>
<tr>
<td></td>
<td>Ceiling limit value: 15* 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>

### Additional Information

- The lists that were valid during the creation were used as basis.

### Exposure Controls

- 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 eyes and skin.

- Breathing Equipment
  - Not required.

- 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

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

#### 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
### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - **Form:** Solid
    - **Color:** According to product specification
  - **Odor:** Characteristic
  - **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**
  - **Vapor density:** Not applicable.
  - **Specific gravity:** 1.8 - 2.5 (Water = 1)
  - **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:**
    - **Organic solvents:** 0.0 %
    - **VOC content:** 0.0 g/l / 0.00 lb/gl
  - **Solids content:** 100.0 %
  - **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.
Degradation starts at 220 °C with 461.2 °C as final degradation temperature.

- 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: 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>1314-13-2 zinc oxide</td>
</tr>
<tr>
<td>Oral LD50 &gt; 5000 mg/kg (rat)</td>
</tr>
</tbody>
</table>

- Primary chemical irritant effect:
  - on the skin: Irritant to skin and mucous membranes.
  - on the eye: Irritating effect.
  - Additional toxicological information:
    Abrasive skin irritant
    Abrasive eye irritant

- Carcinogenic categories

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1309-37-1 diiron trioxide</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (National Toxicology Program)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSHA-Ca (Occupational Safety &amp; Health Administration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

### 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.
  - Additional ecological information:
    - General notes:
      Water hazard class 1 (Self-assessment): slightly hazardous for water
      Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    - 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.
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
    - Class: not regulated
    - Label: -
    - ADN/R Class: not regulated

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

- **Environmental hazards**
  - Marine pollutant: No

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

- **Transport in bulk according to Annex II of MARPOL73/78 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):**
    - 1344-28-1 aluminium oxide
    - 1314-13-2 zinc oxide

  - **TSCA (Toxic Substances Control Act):**
    - 1344-28-1 aluminium oxide
    - 1309-37-1 diiron trioxide
    - 60304-36-1 Potassium aluminum fluoride
    - 7704-34-9 sulfur
    - 471-34-1 calcium carbonate
    - 1314-13-2 zinc oxide

  - **Proposition 65**
    - **Chemicals known to cause cancer:**
      - None of the ingredients is listed.
### Product name: Aluminum Oxide Cut-Off & Wafering Blades, Rubber Bond

(Contd. of page 8)

- **Chemicals known to cause reproductive toxicity for females:**
  
  None of the ingredients is listed.

- **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)**
  
  1314-13-2 zinc oxide
  
  D, I, II

- **TLV (Threshold Limit Value established by ACGIH)**
  
  1344-28-1 aluminium oxide
  
  A4

  1309-37-1 diiron trioxide
  
  A4

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  
  None of the ingredients is listed.

- **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

- **Date of preparation / last revision** 06/08/2018 / -

- **Abbreviations and acronyms:**
  
  TLV: Threshold Limit Value
  
  PEL: Permissible Exposure Limit
  
  REL: Recommended Exposure Limit
  
  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
  
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  
  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
  
  Skin Irrit. 2: Skin corrosion/irritation – Category 2
  
  Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B
  
  STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
  
  Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
  
  Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3
  
  Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
  
  Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3