1 Identification

· Product name: Aluminum Oxide Grinding Stone
· Part number: 81-10900, 80-10920
· Application of the substance / the mixture: Abrasive
· 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
  Carc. 1A H350 May cause cancer.

· Additional information:
  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.

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

  GHS08

· Signal word: Danger

· Hazard-determining components of labeling:
  · Quartz (SiO2)

· Hazard statements
  · May cause cancer.

· Precautionary statements
  · Obtain special instructions before use.

(Contd. on page 2)
**Product name: Aluminum Oxide Grinding Stone**

Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protection clothing/eye protection/face protection.
IF exposed or concerned: Get medical advice/attention.
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 = 0
  - HMIS-ratings (scale 0 - 4)
    - 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.

<table>
<thead>
<tr>
<th>Hazardous Components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1344-28-1 aluminium oxide</td>
<td>50-100%</td>
</tr>
<tr>
<td>13463-67-7 titanium dioxide</td>
<td>Care. 2, H351 ≥0.1-≤1%</td>
</tr>
<tr>
<td>14808-60-7 Quartz (SiO2)</td>
<td>Care. 1A, H350 ≥0.1-≤1%</td>
</tr>
</tbody>
</table>

- **Non-hazardous Components:**
  - Glass or glass porcelain 25-50%
  - Unknown 10-25%

- **Additional information:** Unknown ingredient may contain concentrations of one of the following treatments: sulfur, paraffin or resin.

### 4 First-aid measures

- **Description of first aid measures**
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - 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
    - Breathing difficulty
    - Coughing

- **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.
  - 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:** No special measures required.
- **Methods and material for containment and cleaning up:**
  - Pick up mechanically.
  - 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>1344-28-1 aluminium oxide</th>
<th>15 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13463-67-7 titanium dioxide</td>
<td>30 mg/m³</td>
</tr>
<tr>
<td></td>
<td>14808-60-7 Quartz (SiO2)</td>
<td>0.075 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-2</th>
<th>1344-28-1 aluminium oxide</th>
<th>170 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13463-67-7 titanium dioxide</td>
<td>330 mg/m³</td>
</tr>
<tr>
<td></td>
<td>14808-60-7 Quartz (SiO2)</td>
<td>33 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-3</th>
<th>1344-28-1 aluminium oxide</th>
<th>990 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13463-67-7 titanium dioxide</td>
<td>2,000 mg/m³</td>
</tr>
<tr>
<td></td>
<td>14808-60-7 Quartz (SiO2)</td>
<td>200 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:**
    - 1344-28-1 aluminium oxide
    - PEL: Long-term value: 15*; 5** mg/m³
      - *Total dust; ** Respirable fraction
## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - **Form:** Solid
    - **Color:** Grey
    - **Odor:** Light
    - **Odor threshold:** Not determined.
  - **pH-value:** Not applicable.
  - **Change in condition**
    - **Melting point/Melting range:** Undetermined.
Safety Data Sheet  
acc. to OSHA HCS  

Printing date 04/30/2020  
Version 2.0  
Last revision 04/30/2020  

Product name: Aluminum Oxide Grinding Stone

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling point/Boiling range:</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>· Flash point:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>· Flammability (solid, gaseous):</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Decomposition temperature:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Auto igniting:</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>· Danger of explosion:</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>· Explosion limits:</td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Vapor pressure:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>· Density:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.5 - 3.1</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>· Solubility in / Miscibility with Water:</td>
<td>Slightly soluble.</td>
</tr>
<tr>
<td>· Partition coefficient (n-octanol/water):</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Viscosity:</td>
<td></td>
</tr>
<tr>
<td>Dynamic:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>· Solvent content:</td>
<td></td>
</tr>
<tr>
<td>VOC content:</td>
<td>0.00 %</td>
</tr>
<tr>
<td>Solids content:</td>
<td>100.0 %</td>
</tr>
<tr>
<td>· Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

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
  Keep away from oxidising agents and acidic substances.
  Keep away from alkaline solutions.
· 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)
    Inhalative: LC50/4 h >11 mg/l (rat)

1344-28-1 aluminium oxide

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50</th>
<th>LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>5,010 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>Inhalative</td>
<td>&gt;6 mg/l (rat)</td>
<td></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: Not hazardous for water.
  - 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, ADN, IMDG, IATA
  - Class: not regulated
Product name: Aluminum Oxide Grinding Stone

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
    - TSCA (Toxic Substances Control Act):
      All components have the value ACTIVE.
    - Hazardous Air Pollutants
      None of the ingredients is listed.
  - Proposition 65
    - Chemicals known to cause cancer:
      13463-67-7 titanium dioxide
      14808-60-7 Quartz (SiO2)
    - 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)
      None of the ingredients is listed.
    - TLV (Threshold Limit Value established by ACGIH)
      1344-28-1 aluminium oxide
      13463-67-7 titanium dioxide
      14808-60-7 Quartz (SiO2)
      A4
      A4
      A2
    - NIOSH-Ca (National Institute for Occupational Safety and Health)
      13463-67-7 titanium dioxide
      14808-60-7 Quartz (SiO2)
    - National regulations:
      - Information about limitation of use:
        Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.
Product name: Aluminum Oxide Grinding Stone

- **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.

- **Department issuing SDS:** Environment protection department.
- **Contact:** Kim Dermit
- **Last revision:** 04/30/2020 / 1.0

**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
- OSHA: Occupational Safety & Health
- TLV: Threshold Limit Value
- PEL: Permissible Exposure Limit
- REL: Recommended Exposure Limit
- Carc. 1A: Carcinogenicity – Category 1A
- Carc. 2: Carcinogenicity – Category 2