1 Identification

· Product name: Dia-Grid Diamond Discs, Resin Bond

· Part number:
  50-80800 - 50-81230M
  50-70805M - 50-71220M (RIGID)

· 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. 2  H351 Suspected of causing cancer.
  STOT RE 1  H372 Causes damage to the respiratory system through prolonged or repeated exposure.

  GHS07

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

  Aquatic Chronic 3  H412 Harmful to aquatic life with long lasting effects.

· Additional information:
  Based on health effects for dust
  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).
Product name: Dia-Grid Diamond Discs, Resin Bond

· Hazard pictograms

GHS07  GHS08

· Signal word Danger

· Hazard-determining components of labeling:
nickel powder (particle diameter < 1 mm)

· Hazard statements
May cause an allergic skin reaction.
Suspected of causing cancer.
Causes damage to the respiratory system through prolonged or repeated exposure.
Harmful 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.
If on skin: Wash with plenty of water.
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.
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information: Hazard statements are based on health effects from nickel dust.

· Classification system:

· NFPA ratings (scale 0 - 4)

Health = 0
Fire = 0
Reactivity = 0

· HMIS-ratings (scale 0 - 4)

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.
Product name: Dia-Grid Diamond Discs, Resin Bond

(Contd. of page 2)

<table>
<thead>
<tr>
<th>Hazardous Components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-02-0 nickel powder (particle diameter &lt; 1 mm)</td>
<td>25-50%</td>
</tr>
<tr>
<td></td>
<td>☢ Carc. 2, H351; STOT RE 1, H372; ☢ Skin Sens. 1, H317; Aquatic Chronic 3, H412</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-hazardous Components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nylon backing</td>
<td>25-50%</td>
</tr>
<tr>
<td>Polyurethane resin</td>
<td>10-25%</td>
</tr>
<tr>
<td>7782-40-3 Diamond</td>
<td>1-10%</td>
</tr>
</tbody>
</table>

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.
  - Indications 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 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: 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>7440-02-0 nickel powder (particle diameter &lt; 1 mm)</td>
<td>4.5 mg/m³</td>
</tr>
<tr>
<td>7782-40-3 Diamond</td>
<td>6.3 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-2:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-02-0 nickel powder (particle diameter &lt; 1 mm)</td>
<td>50 mg/m³</td>
</tr>
<tr>
<td>7782-40-3 Diamond</td>
<td>69 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-3:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-02-0 nickel powder (particle diameter &lt; 1 mm)</td>
<td>99 mg/m³</td>
</tr>
<tr>
<td>7782-40-3 Diamond</td>
<td>1,100 mg/m³</td>
</tr>
</tbody>
</table>

(Contd. on page 4)
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

<table>
<thead>
<tr>
<th>Component with limit values that require monitoring at the workplace:</th>
<th>7440-02-0 nickel powder (particle diameter &lt; 1 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
<td>Long-term value: 1 mg/m³</td>
</tr>
<tr>
<td>REL</td>
<td>Long-term value: 0.015 mg/m³ as Ni</td>
</tr>
<tr>
<td>TLV</td>
<td>Long-term value: 1.5* mg/m³ elemental, *inhalable fraction</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:

  Protective gloves

  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: Nitrile rubber, NBR
· 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: Safety glasses

(Contd. on page 5)
### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Information on basic physical and chemical properties</td>
<td></td>
</tr>
<tr>
<td>· General Information</td>
<td></td>
</tr>
<tr>
<td>· Appearance</td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>Solid</td>
</tr>
<tr>
<td>Color</td>
<td>According to product specification</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· pH-value</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>· Change in condition</td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Undetermined.</td>
</tr>
<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>Not determined.</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</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Insoluble.</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

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Reactivity</td>
<td>No further relevant information available.</td>
</tr>
<tr>
<td>· Chemical stability</td>
<td></td>
</tr>
<tr>
<td>· Thermal decomposition / conditions to be avoided</td>
<td>No decomposition if used according to specifications.</td>
</tr>
<tr>
<td>· Possibility of hazardous reactions</td>
<td>No dangerous reactions known.</td>
</tr>
<tr>
<td>· Conditions to avoid</td>
<td>Keep away from open flames. - No smoking.</td>
</tr>
<tr>
<td></td>
<td>Keep away from heat.</td>
</tr>
<tr>
<td>· Incompatible materials</td>
<td>No further relevant information available.</td>
</tr>
<tr>
<td>· Hazardous decomposition products</td>
<td>Formaldehyde</td>
</tr>
<tr>
<td></td>
<td>Ammonia</td>
</tr>
</tbody>
</table>
Product name: Dia-Grid Diamond Discs, Resin Bond

- **Additional information:** Hazardous decomposition products may form during combustion.

## 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity:**
    - **LD/LC50 values that are relevant for classification:**
      - 7440-02-0 nickel powder (particle diameter < 1 mm)
        - Dermal: LD50: 5,010 mg/kg (rat)
  - **Primary chemical irritant effect:**
    - **on the skin:** No irritant effect.
    - **on the eye:** No irritating effect.
    - **Sensitization:** Sensitization possible through skin contact.
  - **Additional toxicological information:**
    - Abrasive eye irritant
    - Abrasive skin irritant

### Carcinogenic categories

- **IARC (International Agency for Research on Cancer)**
  - 7440-02-0 nickel powder (particle diameter < 1 mm)
    - 2B
- **NTP (National Toxicology Program)**
  - 7440-02-0 nickel powder (particle diameter < 1 mm)
    - 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.
  - **Ecotoxic effects:**
    - **Remark:** Harmful to fish
  - **Additional ecological information:**
  - **General notes:**
    - Not hazardous for water.
    - Harmful to 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

(Contd. of page 7)
Product name: Dia-Grid Diamond Discs, Resin Bond

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):
    · 7440-02-0 nickel powder (particle diameter < 1 mm)
  
  · 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:
    · 7440-02-0 nickel powder (particle diameter < 1 mm)
  
  · 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)
    · 7440-02-0 nickel powder (particle diameter < 1 mm)
      [A5]
  
· NIOSH-Ca (National Institute for Occupational Safety and Health)
  · 7440-02-0 nickel powder (particle diameter < 1 mm)

· 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
  Skin Sens. 1: Skin sensitisation – Category 1
  Carc. 2: Carcinogenicity – Category 2
  STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
  Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3