1 Identification

- Product name: Diamond Compound - Oil Soluble
- Part number:
  90-21115-S, 90-21125-S
  90-21195 - 90-21234
  90-24295, 90-24335
- Application of the substance / the mixture
  Abrasive
  Polishing solution
- 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]

Acute Tox. 4 H332 Harmful if inhaled.
STOT SE 3 H336 May cause drowsiness or dizziness.

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

![GHS07]

- Signal word Warning

(Contd. on page 2)
Product name: Diamond Compound - Oil Soluble

Hazard-determining components of labeling:
- Silica-Amorphous Silica fume
- Lithium stearate
- Lubricant

Hazard statements
- Harmful if inhaled.
- May cause drowsiness or dizziness.

Precautionary statements
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Call a poison center/doctor if you feel unwell.
- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:
- NFPA ratings (scale 0 - 4)
  - Health = 2
  - Fire = 1
  - Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  - HEALTH = 2
  - FIRE = 1
  - 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>4485-12-5 Lithium stearate</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>69012-64-2 Silica-Amorphous Silica fume</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>8007-43-0 Lubricant</td>
<td>2.5-10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-hazardous Components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>64741-44-2 Lubricant</td>
<td>50-100%</td>
</tr>
<tr>
<td>7782-40-3 Diamond</td>
<td>10-25%</td>
</tr>
<tr>
<td>9005-65-6 Lubricant</td>
<td>2.5-10%</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. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
  In case of unconsciousness place patient stably in side position for transportation.
· 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
    Headache
    Coughing
    Nausea
    Dizziness
    Unconsciousness
  · 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: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures: Not required.
· Environmental precautions:
  Do not allow to enter sewers/surface or ground water.
  Dilute with plenty of water.
· Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  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

  PAC-1:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance Name</th>
<th>PAC Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>7782-40-3</td>
<td>Diamond</td>
<td>6.3 mg/m³</td>
</tr>
<tr>
<td>4485-12-5</td>
<td>Lithium stearate</td>
<td>45 mg/m³</td>
</tr>
<tr>
<td>69012-64-2</td>
<td>Silica-Amorphous Silica fume</td>
<td>45 mg/m³</td>
</tr>
</tbody>
</table>

(Contd. on page 4)
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:
  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:
    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.

<table>
<thead>
<tr>
<th>PAC-2:</th>
<th>Diamond</th>
<th>69 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>7782-40-3</td>
<td>Diamond</td>
<td>69 mg/m³</td>
</tr>
<tr>
<td>4485-12-5</td>
<td>Lithium stearate</td>
<td>500 mg/m³</td>
</tr>
<tr>
<td>69012-64-2</td>
<td>Silica-Amorphous Silica fume</td>
<td>500 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-3:</th>
<th>Diamond</th>
<th>1,100 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>7782-40-3</td>
<td>Diamond</td>
<td>1,100 mg/m³</td>
</tr>
<tr>
<td>4485-12-5</td>
<td>Lithium stearate</td>
<td>3,000 mg/m³</td>
</tr>
<tr>
<td>69012-64-2</td>
<td>Silica-Amorphous Silica fume</td>
<td>3,000 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4485-12-5 Lithium stearate</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLV</td>
</tr>
<tr>
<td>69012-64-2 Silica-Amorphous Silica fume</td>
</tr>
<tr>
<td>PEL</td>
</tr>
<tr>
<td>TLV</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: Wash hands before breaks and at the end of work.
  · Breathing equipment: Use suitable respiratory protective device when high concentrations are present.
  · Protection of hands: Not required.
  · 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.
### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Appearance:</strong></td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>Pasty</td>
</tr>
<tr>
<td>Color</td>
<td>According to product specification</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined.</td>
</tr>
<tr>
<td>pH-value</td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>177 °C (350.6 °F)</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>160 °C (320 °F)</td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous):</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>&gt;370 °C (&gt;698 °F)</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Auto igniting</strong></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>Danger of explosion:</strong></td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Density at 20 °C (68 °F):</strong></td>
<td>1.20278 g/cm³ (10.0372 lbs/gal)</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with Water:</strong></td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water):</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Solvent content:</strong></td>
<td></td>
</tr>
<tr>
<td>VOC content</td>
<td>0.00 %</td>
</tr>
<tr>
<td>0.0 g/l / 0.00 lb/gl</td>
<td></td>
</tr>
<tr>
<td><strong>Solids content:</strong></td>
<td>100.0 %</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>
10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**: No decomposition if used according to specifications.
- **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 heat,
  - Keep away from oxidising agents and acidic substances,
  - Keep away from alkaline solutions,
  - Keep away from open flames. - No smoking.
- **Incompatible materials**: No further relevant information available.
- **Hazardous decomposition products**: Carbon monoxide and carbon dioxide
- **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**:
    - **ATE (Acute Toxicity Estimate)**
      - Oral LD50 7,250 mg/kg
      - Dermal LD50 12,523 mg/kg
      - Inhalative LC50/4 h 10.2 mg/l
    - **4485-12-5 Lithium stearate**
      - Oral LD50 500 mg/kg (ATE)
      - Dermal LD50 1,100 mg/kg (ATE)
      - Inhalative LC50/4 h 11 mg/l (ATE)
    - **69012-64-2 Silica-Amorphous Silica fume**
      - Oral LD50 >5,110 mg/kg (rat)
      - Dermal LD50 >5,000 mg/kg (rabbit)
      - Inhalative LC50/4 h 3 mg/l (ATE)
    - **8007-43-0 Lubricant**
      - Dermal LD50 2,010 mg/kg (rabbit)
      - Inhalative LC50/4 h 0.5 mg/l (ATE)
- **Primary chemical irritant effect**:
  - **on the skin**: No irritant effect.
  - **on the eye**: No irritating effect.
  - **Sensitization**: No sensitizing effects known.
- **Additional toxicological information**:
  - Specific Target Organ Toxicity - Single Exposure 3 - Target Organ: central nervous system depression
- **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)**
    - 69012-64-2 Silica-Amorphous Silica fume 3
  - **NTP (National Toxicology Program)**
    - None of the ingredients is listed.
Product name: Diamond Compound - Oil Soluble

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.
- 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: 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 MARPOL 73/78 and the IBC Code: Not applicable.
## 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):**
    None of the ingredients is listed.
  - **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:**
      None of the ingredients is listed.
    - **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)**
      None of the ingredients is listed.
    - **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.

## 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

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Product name: Diamond Compound - Oil Soluble

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
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 2: Acute toxicity – Category 2
Acute Tox. 3: Acute toxicity – Category 3
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3