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

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

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

· **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)**

  ![NFPA Rating](image)
  *Health = 0*
  *Fire = 1*
  *Reactivity = 0*

· **HMIS-ratings (scale 0 - 4)**

  ![HMIS Rating](image)
  *Health = 1*
  *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>4485-12-3 Lithium stearate</td>
<td><img src="image" alt="Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332" /> 1-10%</td>
</tr>
<tr>
<td>69012-64-2 Silica-Amorphous Silica fume</td>
<td><img src="image" alt="Acute Tox. 4, H332" /> 1-10%</td>
</tr>
<tr>
<td>8007-43-0 Lubricant</td>
<td><img src="image" alt="Acute Tox. 3, H331" /> 1-10%</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>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. 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
Product name: Diamond Compound - Oil Soluble

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).
  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>7782-40-3 Diamond</td>
<td>6.3 mg/m³</td>
</tr>
<tr>
<td>4485-12-5 Lithium stearate</td>
<td>45 mg/m³</td>
</tr>
<tr>
<td>69012-64-2 Silica-Amorphous Silica fume</td>
<td>45 mg/m³</td>
</tr>
</tbody>
</table>

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

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

7 Handling and storage

· Handling:
· Precautions for safe handling Prevent formation of aerosols.
· 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.
  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.
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>Chemical</th>
<th>PEL: Long-term value</th>
<th>TLV: Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4485-12-5 Lithium stearate</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>69012-64-2 Silica-Amorphous Silica fume</td>
<td>0.8 mg/m³</td>
<td>TLV withdrawn</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.

- **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
  - **Appearance:**
    - Form:                      Pasty
    - Color:                    According to product specification
  - **Odor:**                  Mild
  - **Odor threshold:**        Not determined.
  - **pH-value:**              Not determined.

- **Change in condition**
  - **Melting point/Melting range:** Undetermined.
  - **Boiling point/Boiling range:** 177 °C (350.6 °F)

- **Flash point:** 160 °C (320 °F)

- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** >370 °C (~698 °F)
- **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 determined.
- **Density at 20 °C (68 °F):** 1.20278 g/cm³ (10.0372 lbs/gal)
Product name: Diamond Compound - Oil Soluble

- Relative density: Not determined.
- Vapor density: Not determined.
- Specific gravity: 0.95
- Evaporation rate: Not determined.
- Solubility in / Miscibility with Water: Not miscible or difficult to mix.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- Solvent content:
  - VOC content: 0.00 %
    - 0.0 g/l / 0.00 lb/gal
  - 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.
- 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: 7,257 mg/kg
      - Dermal LD50: >12,518 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: 1.5 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: 1.5 mg/l (ATE)
    - 8007-43-0 Lubricant
      - Dermal LD50: >2,000 mg/kg (rabbit)
Product name: Diamond Compound - Oil Soluble

<table>
<thead>
<tr>
<th>Inhalative</th>
<th>LC50/4 h</th>
<th>5.27 mg/l (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary chemical irritant effect:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>on the skin:</td>
<td>No irritant effect.</td>
<td></td>
</tr>
<tr>
<td>on the eye:</td>
<td>No irritating effect.</td>
<td></td>
</tr>
<tr>
<td>Sensitization:</td>
<td>No sensitizing effects known.</td>
<td></td>
</tr>
<tr>
<td>Additional toxicological information:</td>
<td>Specific Target Organ Toxicity - Single Exposure 3 - Target Organ: central nervous system depression</td>
<td></td>
</tr>
</tbody>
</table>

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.

- 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.
- 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, IMDG, IATA: not regulated

- UN proper shipping name
  - DOT, IMDG, IATA: not regulated

- Transport hazard class(es)
  - DOT, ADN, IMDG, IATA
  - Class: not regulated

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

- Environmental hazards:
  - Marine pollutant: No

(Contd. on page 7)
Product name: Diamond Compound - Oil Soluble

| 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):**
      - None of the ingredients is listed.
  - **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:**
      - 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 Dermit
- **Last revision:** 04/30/2020 / 2.0
- **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)
Product name: Diamond Compound - Oil Soluble

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