1 Identification

- **Product name:** Diamond Slurry, Alcohol-Based, All Microns
- **Part number:** 90-3AB0.25 - 90-3AB9
- **Application of the substance / the mixture:** Polishing solution

2 Hazard(s) identification

- **Classification of the substance or mixture**
  
  GHS02 Flame
  
  Flam. Liq. 2  H225  Highly flammable liquid and vapor.

  GHS07
  
  Eye Irrit. 2A  H319  Causes serious eye irritation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**
  
  GHS02  GHS07

- **Signal word** Danger
- **Hazard statements**
  
  Highly flammable liquid and vapor.

(Contd. on page 2)
Product name: Diamond Slurry, Alcohol-Based, All Microns

Causes serious eye irritation.

**Precautionary statements**
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting/equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Wash thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Classification system:**

- **NFPA ratings (scale 0 - 4)**
  - Health = 1
  - Fire = 3
  - Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**
  - Health = 1
  - Fire = 3
  - 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:**
- 64-17-5 ethyl alcohol
  - Flam. Liq. 2, H225
  - 50-100%
- 67-63-0 isopropyl alcohol
  - Flam. Liq. 2, H225; Eye Irrit. 2A, H319; STOT SE 3, H336
  - 10-25%
- 57-55-6 propylene glycol
  - Acute Tox. 4, H302
  - 2.5-10%

**Non-hazardous Components:**
- 7782-40-3 Diamond
  - ≤2.5%

**Additional information:**
- The specific chemical identity and/or exact percentage of the composition has been withheld as a trade secret.

**4 First-aid measures**

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
Product name: Diamond Slurry, Alcohol-Based, All Microns

- **After skin contact:** Generally the product does not irritate the skin.
- **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**
    - Headache
    - Coughing
    - Nausea
    - Dizziness
    - Disorientation
    - 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:**
  - CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **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**
  - Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
  - Do not allow product to reach sewage system or any water course.
  - Do not allow to enter sewers/surface or ground water.
  - Prevent seepage into sewage system, workpits and cellars.
  - 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>Compound</th>
<th>PAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethyl alcohol</td>
<td>1,800 ppm</td>
</tr>
<tr>
<td>67-63-0 isopropyl alcohol</td>
<td>400 ppm</td>
</tr>
<tr>
<td>57-55-6 propylene glycol</td>
<td>30 mg/m³</td>
</tr>
<tr>
<td>7782-40-3 Diamond</td>
<td>6.3 mg/m³</td>
</tr>
</tbody>
</table>

#### PAC-2:

<table>
<thead>
<tr>
<th>Compound</th>
<th>PAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethyl alcohol</td>
<td>3300* ppm</td>
</tr>
<tr>
<td>67-63-0 isopropyl alcohol</td>
<td>2000* ppm</td>
</tr>
</tbody>
</table>

(Contd. on page 4)
Product name: Diamond Slurry, Alcohol-Based, All Microns

<table>
<thead>
<tr>
<th>Component</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>57-55-6 propylene glycol</td>
<td>1,300 mg/m³</td>
</tr>
<tr>
<td>7782-40-3 Diamond</td>
<td>69 mg/m³</td>
</tr>
</tbody>
</table>

- PAC-3:
  - 64-17-5 ethyl alcohol 15000* ppm
  - 67-63-0 isopropyl alcohol 12000** ppm
  - 57-55-6 propylene glycol 7,900 mg/m³
  - 7782-40-3 Diamond 1,100 mg/m³

7 Handling and storage

- Handling:
  - Precautions for safe handling: No special precautions are necessary if used correctly.
  - Information about protection against explosions and fires:
    Keep ignition sources away - Do not smoke.
    Protect against electrostatic charges.

- 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 in cool, dry conditions in well sealed receptacles.
  - 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:
  - 64-17-5 ethyl alcohol
    - PEL: Long-term value: 1900 mg/m³, 1000 ppm
    - REL: Long-term value: 1900 mg/m³, 1000 ppm
    - TLV: Short-term value: 1880 mg/m³, 1000 ppm
  - 67-63-0 isopropyl alcohol
    - PEL: Long-term value: 980 mg/m³, 400 ppm
    - REL: Short-term value: 1225 mg/m³, 500 ppm
    - Long-term value: 980 mg/m³, 400 ppm
    - TLV: Short-term value: 984 mg/m³, 400 ppm
    - Long-term value: 492 mg/m³, 200 ppm
    - BEI
  - 57-55-6 propylene glycol
    - WEEL: Long-term value: 10 mg/m³
### Ingredients with biological limit values:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>BEI</th>
<th>Medium</th>
<th>Time</th>
<th>Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0 isopropyl alcohol</td>
<td>40 mg/L</td>
<td>urine</td>
<td>end of shift at end of workweek</td>
<td>Acetone (background, nonspecific)</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.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.

#### Breathing equipment:
Not required.

#### Protection of hands:
Not required.

#### Material of gloves:
Butyl rubber, BR

#### Penetration time of glove material:
The exact breakthrough 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: Suspension
  - Color: According to product specification
- **Odor:** Alcohol-like
- **Odor threshold:** Not determined.
- **pH-value:** Not determined.

##### Change in condition

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** 78 °C (172.4 °F)

- **Flash point:** 10 °C (50 °F)

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 425 °C (797 °F)

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.
## Product name: Diamond Slurry, Alcohol-Based, All Microns

### 47. Danger of explosion:

Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

#### 47.1 Explosion limits:

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower</td>
<td>3.5 Vol %</td>
</tr>
<tr>
<td>Upper</td>
<td>15 Vol %</td>
</tr>
</tbody>
</table>

#### 47.2 Vapor pressure at 20 °C (68 °F):

59 hPa (44.3 mm Hg)

#### 47.3 Density:

Not determined.

#### 47.4 Relative density

Not determined.

#### 47.5 Vapor density

1.5 (air = 1)

#### 47.6 Specific gravity:

0.8 (water = 1)

#### 47.7 Evaporation rate

Not determined.

#### 47.8 Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

#### 47.9 Partition coefficient (n-octanol/water):

Not determined.

#### 47.10 Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

#### 47.11 Solvent content:

- Organic solvents: 99.1 %
- VOC content: 99.14 %

991.4 g/l / 8.27 lb/gl

#### 47.12 Solids content:

0.9 %

#### 47.13 Other information

No further relevant information available.

### 10 Stability and reactivity

#### 10.1 Reactivity

No further relevant information available.

#### 10.2 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 heat.
  - Keep away from sources of ignition - No smoking.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide
- **Additional information:** Decomposition products may form during combustion.

### 11 Toxicological information

#### 11.1 Information on toxicological effects

- **Acute toxicity:**

<table>
<thead>
<tr>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>23,200 mg/kg (rat)</td>
</tr>
<tr>
<td>Inhalative LC50/4 h</td>
<td>232 mg/l (rat)</td>
</tr>
</tbody>
</table>

(Contd. on page 7)
### 47.0 Oral LD50
- ethyl alcohol: 7,060 mg/kg (rat)
- isopropyl alcohol: 5,045 mg/kg (rat)
- propylene glycol: 2,000 mg/kg (rat)

### 64.0 Dermal LD50
- ethyl alcohol: 15,800 mg/kg (rabbit)
- isopropyl alcohol: 12,800 mg/kg (rabbit)
- propylene glycol: 20,800 mg/kg (rabbit)

### 65.0 Inhalative LC50/4 h
- ethyl alcohol: 20,000 mg/l (rat)
- isopropyl alcohol: 30 mg/l (rat)

### Primary chemical irritant effect:
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** Abrasive eye irritant

### Carcinogenic categories

- **IARC (International Agency for Research on Cancer)**
  - ethyl alcohol: 1
  - isopropyl alcohol: 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.
14 Transport information

| · UN-Number | DOT, IMDG, IATA | UN1987 |
| · UN proper shipping name | DOT | Alcohols, n.o.s. (Ethanol, Isopropanol) |
| · IMDG | IMDG | ALCOHOLS, N.O.S. (ETHANOL (ETHYL ALCOHOL), ISOPROPA NOL (ISOPROPYL ALCOHOL)) |
| · IATA | IATA | ALCOHOLS, N.O.S. (ETHANOL, ISOPROPANOL (ISOPROPYL ALCOHOL)) |
| · Transport hazard class(es) | DOT | Class 3 Flammable liquids |
| · Class | 3 |
| · Label | 3 |
| · IMDG, IATA | Class 3 Flammable liquids |
| · Pack ing group | DOT, IMDG, IATA | II |
| · Environmental hazards: | DOT | Marine pollutant: No |
| · Special precautions for user | DOT | Warning: Flammable liquids |
| · Danger code (Kemler): | DOT | 33 |
| · EMS Number: | DOT | F-E,S-D |
| · Stowage Category | DOT | B |
| · Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | DOT | Not applicable. |
| · Transport/Additional information: | DOT | On passenger aircraft/rail: 5 L |
| · Quantity limitations | DOT | On cargo aircraft only: 60 L |

(Contd. of page 9)
### 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):
      - 67-63-0 isopropyl alcohol
  - **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:
      - 64-17-5 ethyl alcohol
  - **Carcinogenic categories**
    - EPA (Environmental Protection Agency)
      - None of the ingredients is listed.
    - TLV (Threshold Limit Value established by ACGIH)
      - 64-17-5 ethyl alcohol
      - 67-63-0 isopropyl alcohol
    - 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.
Product name: Diamond Slurry, Alcohol-Based, All Microns

- **Contact:** Kim Dermit
- **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
  - 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
  - REL: Recommended Exposure Limit
  - BEI: Biological Exposure Limit
  - Flam. Liq. 2: Flammable liquids – Category 2
  - Acute Tox. 4: Acute toxicity – Category 4
  - Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3