MATERIAL DATA SHEET

Product Name: Precision Diamond Wafering Blade

Last Revision Date: 05/02/02

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product Name: Precision Diamond Wafering Blade Metal Bond and HYBRID BOND

Application: Wheels for cutting advanced materials, metals, and alloys

Supplier: UKAM Industrial Superhard Tools
25345 Avenue Stanford, Unit 211
Phone: (661) 257-2288
Fax: (661) 257-3833

2. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains: synthetic abrasives

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>%</th>
<th>Hazard classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diamond</td>
<td>7782-40-3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Man: The hazardous properties of the product are considered limited. May cause minor irritation on skin contact.

Environment: Product is not expected to be hazardous to the environment.

4. FIRST AID MEASURES

Inhalation: If uncomfortable during dust-raising work: Move into fresh air and keep at rest.

Skin contact: If uncomfortable during dust-raising work: Remove contaminated clothes and rinse skin thoroughly with water.

Eye contact: If irritation occurs during dust-raising work, flush with plenty of water for up to 15 minutes.

Ingestion: Not likely, due to the form of the product.
5. FIRE FIGHTING MEASURES

Extinguishing Media: Use fire extinguishing media appropriate for surrounding materials.

Specific Hazards: No specific precautions.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid inhalation of dust.

Environmental precautions: Not relevant because of use.

Methods for cleaning up: Not relevant.

7. HANDLING AND STORAGE

Safe handling advice: Avoid inhalation of dust. Observe good industrial hygiene practices.

Technical measures: Work practice should minimize contact.

Technical precautions: Local exhaust is recommended.

Technical measures for safe storage: No special precautions.

Storage conditions: Not relevant

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures: Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of dust. Local exhaust is recommended.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Exposure limits</th>
<th>Type</th>
<th>Notes</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particles (Insoluble) Not</td>
<td>TWA</td>
<td></td>
<td>-</td>
<td>ACGIH (1999)</td>
</tr>
<tr>
<td>Otherwise Classified (PNOC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalable paticulate</td>
<td>10mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respirable particulate</td>
<td>3mg/m³</td>
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</tbody>
</table>

Respiratory equipment: During dust-raising work: Use respiratory equipment with particle filter, type P2.

Hand protection: Wear protective gloves.

Eye protection: Risk of contact: Wear goggles/face shield.
Skin protection: No special precautions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: solid product

Odour: Not relevant

pH: not relevant

Melting point: >220°C

Boiling point: not relevant

Flash point: not relevant

Explosive properties: not relevant

Relative density: 2-4

Solubility: Not relevant

10. STABILITY AND REACTIVITY

Stability: Stable under normal temperature conditions.

Conditions/ materials to avoid: Strong oxidising substances and strong bases.

Hazardous decomposition products: Not relevant.

11. TOXICOLOGICAL INFORMATION

Inhalation: Dust may irritate throat and respiratory system and cause coughing.

Skin contact: Dust has an irritating effect on moist skin.

Eye contact: Dust may cause irritation.

Ingestion: Not likely, due to the form of the product.

Specific effects: None known.

Carcinogenicity: National Toxicology Program (NTP): No.
12. ECOLOGICAL INFORMATION

Mobility: Not relevant

Degradability: Not relevant

Ecotoxicity: The product is not expected to be hazardous to the environment.

13. DISPOSAL CONSIDERATIONS

Dispose of waste and residues according to agreement with local authorities.

Waste from residues: EWC-code: 12 02 99

Contaminated packaging: Dispose of contaminated packings as residue.

14. TRANSPORT INFORMATION

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

15. REGULATORY INFORMATION

Labeling: Based on information from the manufacturer regarding the chemical composition of the product, an assessment by the Danish Toxicology Centre has shown that according to EEC Directives 67/548/EEC and 88/379/EEC, the product is not liable to classification and labelling.

NFPA Rating: -

Specific provisions: TSCA: Listed.

National regulation: Europe/USA: This Safety Data Sheet has been prepared according to the EU-regulation.

EC Directives 67/548/EEC on dangerous substances and 88/379/EEC on dangerous preparations (up to and inclusive of the 25th adaptation). Threshold Limit Values (1999), ACGIH, by the American Conference on Governmental Industrial Hygienists.

16. OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.