## Section 1- PRODUCT IDENTIFICATION

<table>
<thead>
<tr>
<th>COMPOSITION</th>
<th>PRODUCT NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>HfC</td>
<td>Hafnium Carbide</td>
</tr>
</tbody>
</table>

## Section 2- HAZARDOUS INGREDIENTS

Note: Products under normal conditions do not represent an inhalation, ingestion or contact health hazard.

<table>
<thead>
<tr>
<th>MATERIAL OR COMPONENT</th>
<th>CAS NUMBER</th>
<th>WT%</th>
<th>EXPOSURE LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HfC</td>
<td>12069-85-1</td>
<td>100</td>
<td>OSHA PEL (Mg/M3) 0.5mg/m³</td>
</tr>
</tbody>
</table>

## Section 3- PHYSICAL DATA

<table>
<thead>
<tr>
<th>MATERIAL IS (AT NORMAL CONDITIONS)</th>
<th>APPERANCE AND ODOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Liquid □ Solid □ Gas □ Other</td>
<td>Odorless black powder</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MELTING POINT (BASE METAL)</th>
<th>SPECIFIC GRAVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approximately 3890</td>
<td>12.20g/cc</td>
</tr>
</tbody>
</table>

## Section 4- FIRE AND EXPLOSION

- Flash Point (Method Used): N/A
- Flammable Limits: N/A
- LEL: N/A
- UEL: N/A

**EXTINGUISHING MEDIA**
Dry Chemical, CO₂, sand or graphite. DO NOT USE WATER!

**SPECIAL FIRED FIGHTING PROCEDURES**
Wear a self contained breathing apparatus and full protective clothing.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**
Dust explosion hazard. Material may form flammable methane gas on contact with moisture. May also generate toxic fumes if involved in a fire.

## Section 5- REACTIVITY DATA

- **STABILITY**: Stable
- **INCOMPATABILITY (MATERIALS TO AVOID)**: Strong acids & oxidizers

**CONDITIONS TO AVOID**
Heat & Moisture

**HAZARDOUS DECOMPOSITION PRODUCTS**
H₂ gas from contact w/ acids.

## Section 6- HEALTH HAZARD GUIDE

**MAJOR EXPOSURE HAZARD**
- □ Inhalation □ Skin □ Skin Absorption □ Eye Contact □ Ingestion

**EFFECTS OF OVEREXPOSURE**

**INHALATION**: Mild respiratory irritant. May act as a nuisance dust.
**DERMAL/EYE CONTACT**: Irritant, eyes may water.
**OTHER**: Low in toxicity. Chronic exposure may lead to liver damage (tested on lab animal)
**EMERGENCY & FIRST AID PROCEDURES**

**INHALATION:** Remove from exposed area to fresh air; give oxygen if breathing is difficult.

**INGESTION:** Give 1-2 glasses of milk or water to induce vomiting if large quantity ingested.

**SKIN CONTACT:** Wash affected area with soap or mild detergent.

**EYE CONTACT:** Flush eyes with lukewarm water lifting up the upper and lower lids for at least fifteen minutes.

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**Section 7- SPILL OR LEAK PROCEDURES**

**SPILL OR LEAK PROCEDURES**

Isolate area; insure proper ventilation and that water/moisture are kept out of area. Vacuum spill. Take care not to raise dust. Wear a self contained breathing apparatus and full protective clothing.

**WASTE DISPOSAL METHODS**

Dispose of in accordance with applicable federal, state and local regulations.

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**Section 8- SPECIAL PROTECTION**

**RESPIRATORY**

Wear NIOSH approved dust-mist respirator.

**VENTILATION**

Maintain exposure below TLV. Handle in controlled inert atmosphere. Mechanical ventilation recommended.

**EYE PROTECTION & PROTECTIVE CLOTHING**

Safety glasses

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**Section 9- SPECIAL PRECAUTIONS**

Store in a cool dry place away from heat and incompatible materials. Wash thoroughly after handling and before eating.

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