**CHEMICAL IDENTITY**

<table>
<thead>
<tr>
<th>LABEL IDENTITY</th>
<th>PLATINUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMICAL NAME/SYNONYMS</td>
<td>PLATINUM ALLOY</td>
</tr>
<tr>
<td>FORMULA</td>
<td>Pt</td>
</tr>
<tr>
<td>CHEMICAL FAMILY</td>
<td>Metal</td>
</tr>
<tr>
<td>CAS REGISTRY NUMBER</td>
<td>7440-06-4</td>
</tr>
<tr>
<td>HAZARDOUS INGREDIENTS</td>
<td>Platinum Metal</td>
</tr>
<tr>
<td><strong>99.99%:</strong></td>
<td><strong>TLV:</strong> 1 mg/m³</td>
</tr>
<tr>
<td><strong>OSHA/PEL:</strong></td>
<td>1</td>
</tr>
</tbody>
</table>

**PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>COLOR, FORM</th>
<th>Silvery/gray, Odorless</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL FORM</td>
<td>Solid metal</td>
</tr>
<tr>
<td>BOILING POINT</td>
<td>3827º F</td>
</tr>
<tr>
<td>VAPOR DENSITY</td>
<td>NA</td>
</tr>
<tr>
<td>VAPOR PRESSURE</td>
<td>NA</td>
</tr>
<tr>
<td>VOLATILE BY WEIGHT</td>
<td>Essentially zero</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER</td>
<td>Insoluble</td>
</tr>
<tr>
<td>MELTING POINT</td>
<td>1772 F (100% Pt)</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>N/A</td>
</tr>
<tr>
<td>DENSITY:</td>
<td>21.24@20º (100% Pt)</td>
</tr>
</tbody>
</table>

**FIRE AND EXPLOSION HAZARD DATA**

<table>
<thead>
<tr>
<th>FLASH POINT</th>
<th>Non flammable as a solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAMMABILITY</td>
<td>Non flammable as a solid</td>
</tr>
<tr>
<td>EXTINGUISHING MEDIA</td>
<td>This material is non-combustible. Use appropriate extinguishing agent for surrounding fires. Do not use water to extinguish fires around operations involving molten metal, due to the potential for steam explosion</td>
</tr>
<tr>
<td>SPECIAL FIRE FIGHTING PROCEDURES</td>
<td>Self-contained breathing apparatus should be worn when fighting metal dust fires. High levels of dust or fine particles in the air may ignite or explode.</td>
</tr>
</tbody>
</table>
HEALTH HAZARD INFORMATION

TOXICITY DATA……………………………………………… ND

ROUTES OF ENTRY

INHALATION

SKIN

TARGET ORGANS

RESPIRATORY TRACT; SKIN

Carcinogenicity: no  NTP: no  IARC Monographs: no  OSHA Regulate: no

HEALTH HAZARD INFORMATION CONTINUED

EFFECTS OF OVEREXPOSURE: (acute and chronic)

INHALATION: May cause irritation to nose and respiratory tract, if exposure is excessive or prolonged.
OTHER: none

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Individuals who may have had allergic reactions to metals or sensitivity, may encounter skin rash or dermatitis if skin contact with this product occurs. Persons with impaired pulmonary functions, may incur further impairment if dust or fumes are inhaled.

EMERGENCY FIRST AID PROCEDURES:

INGESTION: Obtain medical assistance at once.

INHALATION: Breathing difficulty, caused by inhalation of dust or fume requires removal to fresh air. If breathing has stopped perform artificial respiration and seek medical assistance at once.

SKIN CONTACT: Skin cuts and abrasions can be treated by standard first aid. Skin contamination with dust or powder can be removed with soap and water. If irritation persists obtain medical assistance.

EYE CONTACT: Dust or powder should be flushed from the eyes with running water for 15 minutes. If irritation persists obtain medical assistance.

EMERGENCY OVERVIEW: The alloys as sold in solid form are generally not considered hazardous. However, if the process involves grinding, melting, cutting or any other process that causes a release of dust or fumes, hazardous levels of airborne particulates could be generated.
PLATINUM
MATERIAL SAFETY DATA SHEET

REACTIVITY DATA

STABILITY
Stable

CONDITIONS CONTRIBUTING TO UNSTABILITY
NA

INCOMPATIBLE MATERIALS TO AVOID
Acetylene, Ammonia, Acids and Strong Oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS
None under proper usage conditions

HAZARDOUS POLYMERIZATION
Will Not Occur

CONDITIONS TO AVOID
Conditions which create dust or fumes

SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
In solid form this material poses no special clean-up problems. Use normal clean-up procedures; wet sweeping or HEPA vacuum, for clean-up of dust or powder. Do not use compressed air for cleaning.

WASTE DISPOSAL METHOD:
Because of its high intrinsic value this material should be reclaimed. Dispose of in accordance with all applicable Federal, State and Local Regulations.

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION
Use an appropriate NIOSH approved respirator if airborne dust concentration exceed the PEL or TLV

LOCAL EXHAUST
Recommended, when cutting, grinding or melting or any other operation where dust or fumes are created

PROTECTIVE GLOVES
Recommended to prevent mechanical irritation

EYE PROTECTION
Safety glasses are recommended
Eye wash fountain should be readily available in areas of use or handling.

GENERAL
Recommended

ENVIRONMENTAL SURVEILLANCE
If the operation generates dust or fumes, exposure to airborne materials should be determined by having air samples taken in the employees breathing zone and work area
SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE: In solid form this material poses no special problems. Store metal in a dry area. Do not store adjacent to acids.

TRANSPORTATION REQUIREMENTS: No specific D. O. T. requirements.

DOT HAZARD CLASS: None
UN / NA NUMBER: None
PRODUCT RQ: None
DOT SHIPPING NAME: Not Regulated
TECHNICAL SHIPPING NAME: Metal Alloy

PRECAUTIONARY LABELING NONE
OTHER PRECAUTIONS NONE

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NA= NOT APPLICABLE
ND= NO DATA FOUND