MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT IDENTIFICATION AND USE
Product Identifier: Sterling Silver
Product Application: Fabricated products using sheet, wire, tube, as well as grain / shot for casting.
Manufacturers Name: IMPERIAL SMELTING AND REFINING CO. LTD.
Complete Address: 451 DENISON ST. MARKHAM, ONTARIO L3R 1B7
Emergency Telephone No.: (905) 475-9673
Suppliers Name: same
Complete Address: 
Emergency Telephone No.: 

SECTION 2 - HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Ingredients</th>
<th>%</th>
<th>CAS #</th>
<th>TLV</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILVER</td>
<td>60 – 99</td>
<td>7440-22-4</td>
<td>0.10</td>
<td>N.AV</td>
</tr>
<tr>
<td>COPPER</td>
<td>5 - 30</td>
<td>7440-50-8</td>
<td>0.2</td>
<td>2.0</td>
</tr>
</tbody>
</table>

SECTION 3 - PHYSICAL DATA

<table>
<thead>
<tr>
<th>Physical State -</th>
<th>SOLID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance -</td>
<td>Plate, wire, tube, grain / shot</td>
</tr>
<tr>
<td>Density (g/cm³) -</td>
<td>10.35</td>
</tr>
<tr>
<td>Liquidus (°C) -</td>
<td>895</td>
</tr>
<tr>
<td>Solidus (°C) -</td>
<td>810</td>
</tr>
</tbody>
</table>

Information Not Applicable: Odour threshold; vapour pressure; vapour density; evaporation rate; pH

SECTION 4 - FIRE AND EXPLOSION DATA

Flammability: None
Explosion Data: None
Extinguishing Media: Class D extinguisher; sand or other non-flammable solid
Information Not Applicable: Flashpoint; upper and lower flammable limit; auto-ignition temperature; hazardous combustion products

SECTION 5 - REACTIVITY DATA

Chemical Stability: Product is stable under normal ambient working conditions
Incompatibility: Keep all products away from strong acids, halogens and / or acetylene. When used as melt feed / casting grain, do not add any quantity of water to molten metal as an explosion will result. Ensure cast and soldered pieces are fully solidified before pouring water on or over them.
Hazardous Decomposition Products: Avoid processes that involve exposure to temperatures over 1045 °C / 1913 °F, as metal fumes may be liberated.
SECTION 6 - TOXICOLOGICAL PROPERTIES
Route of Entry: Inhalation or skin contact

Effects of Acute Exposure to Material:
For material used as casting grain, inhalation of freshly formed fume may cause metal fume fever. Initial symptoms include dryness and throat irritation. Several hours after exposure signs include a metallic taste in the mouth, headache, fever, chills, excessive sweating, muscle pain, nausea, vomiting and weakness. Recovery generally occurs within 48 hours. It is recommended that appropriate eye and hand protection is recommended.
For formed solid metal pieces, it is recommended that gloves be worn whenever material is worked, cut or assembled.
For brazed and soldered pieces, check the MSDS for the solder or brazing alloy.

Effects of Chronic Exposure: There are no known chronic effects relating to repeated incidences of metal fume fever.

Synergistic Materials: None LD50: N. Av LC50: N. Av

SECTION 7 - PREVENTIVE MEASURES

Engineering Controls: Good general area ventilation may be sufficient to vent any low level fume generated during processing. Targeted suitable local ventilation should be used when items are cast, soldered or brazed, and during finishing. Should there be any questions, contact a health and safety or ventilation specialist to assess specific items in your facility. References include:
Industrial Ventilation: A manual recommended practice; by the ACGIH

Personal Protective Equipment:
Gloves: Required if dermatitis results from handling. Use appropriate high temperature hand protection when casting, soldering or brazing with sterling silver.
Respirator: Low fume concentrations in vicinity of TLV, use portable fume respirator or high efficiency particulate filter (NIOSH APPROVED). When soldering or brazing, consult the MSDS for the solder or brazing alloy to ensure ventilation is suitable.
Consult: CSA STD. Z94. 4-M1982 “Selection, Care and Use of Respirator”
Eye Protection: Tinted shielded safety glasses should be worn to provide protection against molten metal splashes and strong ultra-violet or infrared energy emitted form the molten metal. Consult: CSA STD. Z94.3-M1982 “Industrial Eye and Face Protectors”.
Standard safety glasses are recommended whenever material is processed, cut and / or finished.

Leak and Spill Procedures: Smother spill of molten metal with sand or other suitable class D extinguishing media. Spill of solid material can be swept up. It should not be re-used as it may have become contaminated.
Waste Disposal: Return to manufacturer for refining
Storage Requirements: Store in dry container away from incompatibles

SECTION 8 - FIRST AID MEASURES

If a person breathes large amounts of metal fume, move them to fresh air. If breathing has stopped, perform artificial respiration. Keep the person warm and at rest. If breathing is difficult, provide oxygen. Take the person to medical attention if they exhibit symptoms of metal fume fever noted in Section 6. Administer normal first aid to burns caused by molten metal. If dermal irritation initiates from handling material, wash affected area thoroughly with soap and water.

SECTION 9 - PREPARATION DATE OF MSDS
Prepared by: A. Anderson, Senior Project Manager
Phone Number: (905) 475-9566 Date: August 29, 2007