1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION:

Product Name: Tin
Date of Prep: 15 November 2011
MSDS #: 901154.001
Revision: E

2. COMPOSITION/INFORMATION ON INGREDIENTS:

<table>
<thead>
<tr>
<th>CHEMICAL INGREDIENT NAME</th>
<th>CAS NUMBER</th>
<th>EC NUMBER</th>
<th>% BY WT.</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>HAZARD SYMBOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin</td>
<td>7440-31-5</td>
<td>2311418</td>
<td>99+</td>
<td>None</td>
<td>A4</td>
<td>None</td>
</tr>
</tbody>
</table>

Notes:

3. HAZARDS IDENTIFICATION: Avoid inhalation or prolonged contact

4. FIRST AID MEASURES:

Inhalation: Remove to fresh air.
Skin Contact: Wash with soap and water.
Eye Contact: Immediately flush with water for a minimum of 15 minutes.
Ingestion: Get medical attention.

After following first aid measures, seek medical attention.

5. FIRE-FIGHTING MEASURES:

Flammable Properties: Not Applicable
Extinguishing Media: Water spray, carbon dioxide, dry chemical
Unique Aspects Contributing To a Fire: Not Applicable
Special Fire Fighting Procedures: Not Applicable
Note: As in any fire, wear self-contained breathing apparatus, and full protective gear.

6. ACCIDENTAL RELEASE MEASURES: Sweep up, place in a plastic bag and hold for waste disposal.

7. HANDLING AND STORAGE: Avoid inhalation, prolonged or repeated exposure.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Handle in accordance with good laboratory practices.

Respiratory Protection: Not normally needed. If exposure limits are exceeded, use approved respirator.
Eye Protection: Safety glasses with side shields.
Skin Protection: Neoprene or other chemical resistant gloves. Disposable nitrile are acceptable for light intermittent exposure.
Engineering Controls: No special requirements. Handle in an area with good general room ventilation.
9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Gray solid
Physical State: Solid
Flash Point: Non Flammable
Vapor Pressure: 1 mm@1609°C
Odor: N/A
Explosion Limits: N/A
pH: N/A
Boiling Point: 2507°C
Specific Gravity: 7.31 g/mL
Melting Point: 232°C
Vapor Density (air=1): 0
Solubility in Water: Insoluble
Other: N/A

10. STABILITY AND REACTIVITY:

Hazardous Polymerization: ☒Will Not Occur ☐May Occur
Stability: Stable
Hazardous Decomposition/Combustion Products: Tin oxides
Conditions & Materials to Avoid: Strong oxidizing agents, sulfur, strong bases, halogens

11. TOXICOLOGICAL INFORMATION:

Primary Route(s) of Exposure Under Normal Use: Ingestion
Target Organ(s): Not Available
Acute Effects: Not Available
Chronic Effects: Not Available
Other Information: Chemical Ingredient(s) not classified as carcinogen(s) by OSHA, IARC, NTP, ACGIH, or California.

12. ECOLOGICAL INFORMATION: No data available.

13. DISPOSAL CONSIDERATIONS: Observe all federal, state and local environmental regulations.

14. TRANSPORT INFORMATION:

U.S. DOT: Shipping Name: None
Hazard Class: Non-hazardous for transport
UN/NA #: Non-hazardous for air transport
Packing Group #: Non-hazardous for transport
IATA/ICAO:

15. REGULATORY INFORMATION:

EU Risk/Safety Phrases: Do not breath dust
U.S. TOSCA: Yes
Canada: This product has been classified according to the hazard criteria of the CPR and this MSDS contains all the information required by the CPR.

16. OTHER INFORMATION:

U.S. EPA SARA

<table>
<thead>
<tr>
<th>313 Chemicals</th>
<th>CERCLA RD</th>
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</thead>
<tbody>
<tr>
<td>No</td>
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</tr>
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<table>
<thead>
<tr>
<th>National Fire Protection Association Rating</th>
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</thead>
<tbody>
<tr>
<td>HEALTH</td>
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</tbody>
</table>

Notes: Not Established (NE) means a value has not been set or there is no information available. Not Applicable (NA) means that the topic is not pertinent.

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