MATERIAL SAFETY DATA SHEET

1. Product And Company Identification

PRODUCT NAME: Saccharin Solutions, Sensitivity and Fit Test

MANUFACTURER:
TSI Incorporated
500 Cardigan Road
Shoreview, MN 55126

INFORMATION PHONE NUMBER: (651) 490-2811  TOLL FREE: (800) 874-2811
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EMAIL: answers@tsi.com
MSDS DATE OF PREPARATION/REVISION: 08/28/09

PRODUCT USE: Solution used in respirator fit tests

2. Hazards Identification

Clear, colorless solution with no odor. Sweet taste.

EMERGENCY OVERVIEW

May cause mild eye irritation. Extremely sweet taste.

3. Composition/Information On Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Saccharin</td>
<td>82385-42-0</td>
<td>&lt;1 to 50%</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt;50%</td>
</tr>
</tbody>
</table>

(See Section 8 for Exposure Limits)

4. First Aid Measures

INHALATION: Move to fresh air. Seek medical advice if cough, shortness of breath, or other respiratory problems occur.

SKIN CONTACT: Rinse thoroughly with water. Seek medical advice if redness, swelling, itching, or burning occurs.

EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids. Obtain medical attention if irritation persists.

INGESTION: No first aid should be needed. Seek advice of medical personnel if gastrointestinal symptoms occur.

5. Firefighting Measures

EXTINGUISHING MEDIA: Use media suitable for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.
UNUSUAL FIRE HAZARDS: None known.

HAZARDOUS COMBUSTION PRODUCTS: None known.

6: Accidental Release Measures

Contain and collect with inert absorbent material and place in a suitable container for disposal.

7. Handling and Storage

Avoid contact with the eyes. No special storage conditions required.

8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>EXPOSURE LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Saccharin</td>
<td>None Established</td>
</tr>
<tr>
<td>Water</td>
<td>None Established</td>
</tr>
</tbody>
</table>

VENTILATION: None needed under normal use conditions.

RESPIRATORY PROTECTION: None under normal use conditions.

GLOVES: None under normal use conditions.

EYE PROTECTION: Safety glasses or goggles recommended.

9. Physical and Chemical Properties

APPEARANCE AND ODOR: Clear, colorless liquid with no odor. Extremely sweet taste.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Not determined</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY:</td>
<td>Not determined</td>
</tr>
<tr>
<td>BOILING POINT:</td>
<td>Not determined</td>
</tr>
<tr>
<td>VAPOUR PRESSURE:</td>
<td>Same as water</td>
</tr>
<tr>
<td>FREEZING POINT:</td>
<td>Not determined</td>
</tr>
<tr>
<td>VAPOUR DENSITY:</td>
<td>Same as water</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER:</td>
<td>Complete</td>
</tr>
<tr>
<td>PERCENT VOLATILE:</td>
<td>&gt;50%</td>
</tr>
<tr>
<td>VISCOSITY:</td>
<td>Not determined</td>
</tr>
<tr>
<td>EVAPORATION RATE:</td>
<td>Not determined</td>
</tr>
<tr>
<td>COEFFICIENT OF WATER/OIL DISTRIBUTION:</td>
<td>Not determined</td>
</tr>
<tr>
<td>FLASH POINT:</td>
<td>None</td>
</tr>
<tr>
<td>AUTOIGNITION TEMP:</td>
<td>None</td>
</tr>
<tr>
<td>FLAMMABILITY LIMITS:</td>
<td>LEL: None</td>
</tr>
<tr>
<td>UEL: None</td>
<td></td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

STABILITY: Stable

CONDITIONS TO AVOID: None currently known.

INCOMPATIBILITY: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition will produce oxides of carbon, sulfur, and nitrogen.

HAZARDOUS POLYMERIZATION: Will not occur.
11. Toxicological Information

POTENTIAL HEALTH EFFECTS:

**ACUTE HAZARDS:**
INHALATION: Inhalation of aerosol may cause upper respiratory tract irritation.

SKIN CONTACT: Prolonged skin contact may cause mild irritation.

EYE CONTACT: May cause mild eye irritation.

INGESTION: Not intended for ingestion. However, no unusual hazards are expected.

CHRONIC HAZARDS: None expected.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

CARCINOGEN: None of the components of this product are listed as carcinogens by OSHA, IARC, NTP or ACGIH.

**Acute Toxicity Values:**
Sodium Saccharin: Oral rat LD50: 14,200 mg/kg

12. Ecological Information

No ecotoxicity data is available for this product or its components at this time.

13. Disposal Considerations

Recycle, incinerate or landfill in accordance with all local, state/provincial and federal regulations.

14. Transport Information

Not regulated for transport by DOT, IATA, or IMDG.

15. Regulatory Information

EPA SARA 311/312 HAZARD CLASSIFICATION: Not hazardous

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CERCLA SECTION 103: This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CALIFORNIA PROPOSITION 65: This product contains the following substances known to the State of California to cause cancer, birth defects or other reproductive harm: None.
INTERNATIONAL INVENTORIES:

CANADIAN ENVIRONMENTAL PROTECTION ACT: All of the ingredients are listed on the Canadian Domestic Substances List.

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS): All of the ingredients are listed on the EINECS inventory.

AUSTRALIA: All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances

JAPAN: All of the ingredients of this product are listed on the Japanese Existing and New Chemical Substances (MITI) List.

KOREA: All of the ingredients of this product are listed on the Korean Existing Chemicals List (KECL).

CHINA: All of the ingredients of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

PHILIPPINES: All of the ingredients of this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS).

NEW ZEALAND: All of the ingredients of this product are listed on the Hazardous Substances and New Organisms (HSNO) List.

### 16. Other Information

<table>
<thead>
<tr>
<th>NFPA Rating</th>
<th>Fire: 0</th>
<th>Health: 0</th>
<th>Reactivity: 0</th>
</tr>
</thead>
</table>

REVISION SUMMARY: New MSDS.

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