1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Swisher Liquid Metal Safe

Product code: 42118-1
Reference number(s): 42118-5 / 42118-15
Recommended Use: Metal Safe Dish Machine Detergent

Distributor: Swisher Hygiene Inc.
4725 Piedmont Row Drive,
Suite 400,
Charlotte, NC 28210

Chemical Emergency Phone Number: 800-424-9300 (Chemtrec)
Company Emergency Phone Number: 800-444-4138

2. HAZARDS IDENTIFICATION

Emergency Overview
Harmful if swallowed
Harmful if inhalation exposure limits are exceeded
Causes eye and skin irritation

Appearance: Clear Liquid
Physical state: liquid.
Odor: Bland Scent

Potential Health Effects
Acute toxicity
Eyes: Irritation or burns
Skin: Causes irritation and burning
Inhalation: Causes irritation
Ingestion: Causes irritation

Chronic Effects: No known effect based on information supplied

Aggravated Medical Conditions: None known.

Environmental hazard: See Section 12 for additional Ecological Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
</table>

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4. FIRST AID MEASURES

Eye contact
Flush with flowing water for 15 minutes & see physician.

Skin contact
Flush with flowing water for 15 minutes.

Inhalation
Move to fresh air

Ingestion
Drink large amounts of water or milk. DO NOT INDUCE VOMITING. See a physician immediately

Notes to physician
Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties
Not flammable

Flash point
N/A

Suitable Extinguishing Media
Dry chemical, water mist, alcohol foam Carbon dioxide (CO₂)

Hazardous Combustion Products
Carbon oxides

Explosion Data
Sensitivity to Mechanical Impact
none

Sensitivity to Static Discharge
none

Protective Equipment and
Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Ensure adequate ventilation

Environmental precautions
Try to prevent the material from entering drains or water courses

Methods for Containment
Prevent further leakage or spillage if safe to do so

Methods for cleaning up
Stop leak, dilute material spilled with dilute acetic acid (vinegar) to a pH of less than 10

7. HANDLING AND STORAGE

Advice on safe handling
KEEP OUT OF REACH OF CHILDREN CAUTION Wash hands before eating. Keep container tightly closed when not in use

Technical measures/Storage conditions
Store in cool dry place. Avoid all contact. Store upright in original closed container

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Exposure Guidelines

Review Section 3 & 4 for Exposure Guidelines.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium metasilicate</td>
<td></td>
<td></td>
<td>2mg/m³</td>
</tr>
</tbody>
</table>

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment Institutional Environment

**Eye/Face Protection**
Safely glasses are suggested when using this product in heavy use and institutional environments.

**Consumer Environments**
Care should be taken to avoid Eye contact.

**Skin and body protection**
Rubber gloves

**Respiratory protection**
Unnecessary in open institutional enviroment.

**Hygiene measures**
Practice good personal hygiene. Wash after handling.

Personal Protective Equipment Industrial Environment

**Eye/Face Protection**
Splash-proof chemical goggles or face shield.

**Skin and body protection**
Impervious rubber, alkali-proof protective gloves Impervious rubber boots & apron.

**Respiratory protection**
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures**
Practice good personal hygiene. Wash after handling. Shower at end of work period

Practice good personal hygiene. Wash after handling

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
<td>Odor</td>
<td>Bland Scent</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear Liquid</td>
<td>Odor Threshold</td>
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</tr>
<tr>
<td>Color</td>
<td>clear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>11.0</td>
<td></td>
<td>No information available</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td></td>
<td></td>
<td>No information available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td></td>
<td></td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling point/bubbling range</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Flash Point</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Evaporation rate</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td></td>
<td></td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>upper flammability limit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lower flammability limit</td>
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</tr>
<tr>
<td>Explosion Limits</td>
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<tr>
<td>upper</td>
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<td></td>
</tr>
<tr>
<td>lower</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
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<td>Specific Gravity</td>
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<tr>
<td>Water solubility</td>
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<tr>
<td>Solubility in other solvents</td>
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</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
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<td></td>
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<tr>
<td>Autoignition temperature</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Stability
Stable

Incompatible products
Strong acids and oxidizing agents

Conditions to Avoid
Elevated Temperatures

Hazardous Decomposition Products
Carbon oxides

Hazardous Polymerization
Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Product Information
Product does not present an acute toxicity hazard based on known or supplied information.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral 600 mg/kg (Rat)</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium metasilicate</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chronic toxicity

Target Organ Effects
None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity
The environmental impact of this product has not been fully investigated

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae 210: 96 h Brachydanio rerio mg/L LC50 210: 96 h Brachydanio rerio mg/L LC50 semi-static</th>
<th>Toxicity to microorganisms 216: 96 h Daphnia magna mg/L EC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium metasilicate</td>
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</tr>
</tbody>
</table>

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods
Neutralized, diluted material may be flushed to sewer
Contaminated packaging  Do not re-use empty containers

### 14. TRANSPORT INFORMATION

**Note**  Cleaning Compound, Not Regulated

**Dot Proper shipping name**  Not regulated  Cleaning Compound, Not Regulated

**TDG**  Not regulated

**MEX**  Not regulated

**ICAO**  Not regulated

**ICAO/IATA**  Not regulated

**IMDG / IMO**  Not regulated

**RID**  Not regulated

**ADR/RID**  Not regulated

**ADN**  Not regulated

### 15. REGULATORY INFORMATION

#### International Inventories

- **TSCA**  TSCA
- **DSL**  Complies
- **NDSL**  Complies
- **EINECS**  Complies
- **ELINCS**  -
- **ENCS**  Complies
- **IECSC**  Complies
- **KECL**  Complies
- **PICCS**  Complies
- **AICS**  Complies

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
**ENCS** - Japan Existing and New Chemical Substances
**IECSC** - China Inventory of Existing Chemical Substances
**KECL** - Korean Existing and Evaluated Chemical Substances
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances
**AICS** - Australian Inventory of Chemical Substances

#### U.S. Federal Regulations

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

- **Acute Health Hazard**  no
Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

International Regulations

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION

Prepared By: Swisher Hygiene Inc.
4725 Piedmont Row Drive
Suite 400
Charlotte, NC 28210

Issuing Date: 10-Oct-2011
Revision Date: 10-Nov-2011
Revision Note: No information available

Disclaimer:
The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Material Safety Data Sheet