1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Swisher Orsilic
Product code: 42137-50
UN/ID No: UN3262
Recommended Use: Laundry Builder

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
Danger. Corrosive. Causes burns by all exposure routes.
Target Organs: Eyes, Skin, Respiratory tract and Digestive Tract.

Appearance: granules
Physical state: solid.
Odor: Odorless

Potential Health Effects
Acute toxicity
Eyes: Causes burns. May cause chemical conjunctivitis and corneal damage. May cause blindness.
Skin: When contact with wet material or moist skin may cause severe irritation, pain, and possibly burns.
Inhalation: Causes chemical burns to the respiratory tract. Aspiration may lead to pulmonary edema. Effects may be delayed.
Ingestion: May cause severe and permanent damage to the digestive tract.

Chronic Effects: Effects may be delayed. May cause dermatitis.


Aggravated Medical Conditions: None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

See Section 12 for additional Ecological Information.
This product is 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>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>25.0-45.0</td>
</tr>
<tr>
<td>Sodium metasilicate</td>
<td>6834-92-0</td>
<td>60.0-80.0</td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES

**Eye contact**

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**Skin contact**

Immediately flush with plenty of cool water for at least 15 minutes, while removing contaminated clothing and shoes. Call a physician immediately.

**Inhalation**

Remove to fresh air. If breathing has stopped, apply suitable artificial respiration. Get medical help.

**Ingestion**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Give large amounts of water. Get medical aid immediately.

**Notes to physician**

Treat symptomatically

### 5. FIRE-FIGHTING MEASURES

**Flammable Properties**

Not combustible

**Flash point**

none

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

**Unsuitable Extinguishing Media**

DO NOT USE WATER.

**Hazardous Combustion Products**

Silicon Oxide. Sodium Oxide.

**Explosion Data**

Sensitivity to Mechanical Impact: none  
Sensitivity to Static Discharge: none

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Additional protective clothing required, such as a chemical suit, due to corrosive nature of substance. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool.

**NFPA**

Health Hazard: 0  
Flammability: 0  
Stability: 0  
Physical and chemical hazards: -

**HMIS**

Health Hazard: 3  
Flammability: 0  
Physical Hazard: 1  
Personal protection: E

### 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
Use proper personal protective equipment as indicated in Section 8.
Requires a dust mask at a minimum.
Spills/Leaks: Keep unauthorized personnel away. Do not touch or walk through spilled
material. Avoid generating dusty conditions. Avoid using water, as product is slippery when
wet. Stop leak if you can do it without risk. Vacuum or sweep up material and place into a
suitable disposal container.

7. HANDLING AND STORAGE

Advice on safe handling
Keep container tightly closed when not in use Do not get in eyes, on skin or on clothing
Wash thoroughly after handling Do not breathe dust, mist, or vapor Do not ingest or inhale

Technical measures/Storage conditions
Keep container tightly closed Store in a cool, dry, well-ventilated area away from
incompatible substances

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 hydroxide</td>
<td></td>
<td>TWA: 2 mg/m³</td>
<td>IDLH: 10 mg/m³</td>
</tr>
<tr>
<td>1310-73-2</td>
<td></td>
<td></td>
<td>Ceiling: 2 mg/m³</td>
</tr>
<tr>
<td>Sodium metasilicate</td>
<td>6834-92-0</td>
<td>2mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

Engineering Measures
Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment Institutional Environment
Eye/Face Protection
Safety 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 protectcive 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
Physical state solid
Appearance granules
Color Gray White

Property Values Remarks Methods
pH 12.5 No information available
Melting/freezing point No information available

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10. STABILITY AND REACTIVITY

Stability
Stable

Incompatible products
Acids Sugars. Halogenating Agents Metals

Conditions to Avoid
Water.

Hazardous Decomposition Products
Irritating and toxic fumes and gases.

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</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td></td>
<td>1350 mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Rabbit)</td>
<td></td>
</tr>
<tr>
<td>Sodium metasilicate</td>
<td>600 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Rat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12. ECOLOGICAL INFORMATION

Ecotoxicity
Moderate toxicity.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to microorganisms</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>45.4: 96 h Oncorhynchus mykiss mg/L LC50 static</td>
<td>210: 96 h Brachydanio rerio mg/L LC50 210: 96 h Brachydanio rerio mg/L LC50 semi-static</td>
<td>216: 96 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
<tr>
<td>Sodium metasilicate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Contaminated packaging
Do not re-use empty containers

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>Toxic Corrosive</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

Note
UN3262, Corrosive Solid, Basic, Inorganic, n.o.s. (Contains Sodium Metasilicate, Anhydrous and Sodium Hydroxide), 8, PG II

Dot
Regulated
Proper shipping name
UN3262, Corrosive Solid, Basic, Inorganic, n.o.s. (Contains Sodium Metasilicate, Anhydrous and Sodium Hydroxide), 8, PG II
Hazard class
8
UN/ID No
UN3262
Packing Group
II

TDG
Not regulated

MEX
Not regulated

ICAO
Not regulated

ICAO/IATA
Not regulated

IMDG / IMO
Not regulated

RID
Not regulated
15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>TSCA</td>
</tr>
<tr>
<td>DSL</td>
<td>Complies</td>
</tr>
<tr>
<td>NDSL</td>
<td>Complies</td>
</tr>
<tr>
<td>EINECS</td>
<td>Complies</td>
</tr>
<tr>
<td>ELINCS</td>
<td></td>
</tr>
<tr>
<td>ENCS</td>
<td>Complies</td>
</tr>
<tr>
<td>IECSC</td>
<td>Complies</td>
</tr>
<tr>
<td>KECL</td>
<td>Complies</td>
</tr>
<tr>
<td>PICCS</td>
<td>Complies</td>
</tr>
<tr>
<td>AICS</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL/NDSL</td>
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<tr>
<td>EINECS/ELINCS</td>
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</tr>
<tr>
<td>ENCS</td>
<td></td>
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<tr>
<td>IECSC</td>
<td></td>
</tr>
<tr>
<td>KECL</td>
<td></td>
</tr>
<tr>
<td>PICCS</td>
<td></td>
</tr>
<tr>
<td>AICS</td>
<td></td>
</tr>
</tbody>
</table>

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
SARA TITLE III (EPCRA) NOTIFICATION: Does not contain chemicals subject to the reporting requirements of Section 302, 304, or 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986.
COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) NOTIFICATION: SODIUM HYDROXIDE
For more information, consult 40 CFR parts 302, 355, 370, 372, and 40 CFR part 68.

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>no</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>no</td>
</tr>
</tbody>
</table>

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).

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>1000 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

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.
16. OTHER INFORMATION

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

Issuing date: 23-Dec-2011
Revision Date: 27-Dec-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