Section 1. Chemical product and company identification

<table>
<thead>
<tr>
<th>Trade name</th>
<th>ATLAS RUST SOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product use</td>
<td>Laundry product</td>
</tr>
<tr>
<td>Supplier</td>
<td>Ecolab Inc. Textile Care Division</td>
</tr>
<tr>
<td>Code</td>
<td>969667</td>
</tr>
<tr>
<td>Date of issue</td>
<td>29-March-2006</td>
</tr>
</tbody>
</table>

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Composition, information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium bifluoride</td>
<td>1333-83-1</td>
<td>39</td>
</tr>
<tr>
<td>alkali fluorosilicates (Na)</td>
<td>16893-85-9</td>
<td>20 - 50</td>
</tr>
<tr>
<td>sodium chloride</td>
<td>7647-14-5</td>
<td>20 - 50</td>
</tr>
</tbody>
</table>

Section 3. Hazards identification

Physical state: Solid. (Powder.)
Emergency overview: DANGER!

CAUSES EYE AND SKIN BURNS.
CAUSES RESPIRATORY TRACT IRRITATION.
HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED.
Chronic low level exposure may result in mottling of teeth, joint stiffness, and weakening of bones (osteosclerosis).
Do not ingest. Do not get in eyes, on skin or on clothing. Avoid breathing dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Potential acute health effects

- **Eyes**: Corrosive to eyes.
- **Skin**: Harmful if absorbed through the skin. Chronic low level exposure may result in mottling of teeth, joint stiffness, and weakening of bones (osteosclerosis). Corrosive to the skin.
- **Inhalation**: Irritating to respiratory system.
- **Ingestion**: Harmful if swallowed. Causes burns to mouth, throat and stomach.

See toxicological information (section 11)

Section 4. First aid measures

- **Eye contact**: In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Get medical attention immediately.
- **Skin contact**: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately. Apply calcium gluconate gel, if available, or milk of magnesia to affected area.
- **Inhalation**: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
- **Ingestion**: Rinse mouth; then drink one or two large glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately. If available, take several calcium antacid tablets (eg Tums) or several tablespoons of milk of magnesia.
Section 5. Fire fighting measures

Flash point: > 100°C
Product does not support combustion.

Products of combustion: These products are halogenated compounds, hydrogen chloride, hydrogen fluoride.

Fire-fighting media and instructions: Use an extinguishing agent suitable for the surrounding fire.
Dike liquid for later disposal.
No specific hazard.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions: Ventilate area of leak or spill. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8). Stop leak if without risk. Do not allow to enter drains or watercourses.

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up: If emergency personnel are unavailable, vacuum or carefully scoop up spilled material and place in an appropriate container for disposal by incineration. Avoid creating dusty conditions and prevent wind dispersal.

Section 7. Handling and storage

Handling: Do not ingest. Do not get in eyes or on skin or clothing. Avoid breathing dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Storage: Keep out of the reach of children. Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 50°C

Section 8. Exposure controls, personal protection

Engineering controls: Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Provide eyewash and safety shower in area if contact or splash hazard exists.

Personal protection

Eyes: Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.

Hands: Use chemical-resistant, impervious gloves.

Skin: Use synthetic apron, other protective equipment as necessary to prevent skin contact.

Respiratory: Avoid breathing dust.

Name

sodium bifluoride

ACGIH TLV (United States, 1/2005).
TWA: 2.5 mg/m³ 8 hour(s). Form: All forms
OSHA PEL (United States, 8/1997).
TWA: 2.5 mg/m³ 8 hour(s). Form: All forms
OSHA PEL Z2 (United States, 8/1997).
TWA: 2.5 mg/m³ 8 hour(s). Form: Dust

alkali fluorosilicates (Na)

ACGIH TLV (United States, 1/2005).
TWA: 2.5 mg/m³ 8 hour(s). Form: All forms
OSHA PEL (United States, 8/1997).
TWA: 2.5 mg/m³ 8 hour(s). Form: All forms
OSHA PEL Z2 (United States, 8/1997).
TWA: 2.5 mg/m³ 8 hour(s). Form: Dust
Section 9. Physical and chemical properties

Physical state : Solid. (Powder.)
Color : White.
Odor : Odorless.
\[ \text{pH} \] : 4 (1%)
Solubility : Partially soluble in cold water, hot water.

Section 10. Stability and reactivity

Stability : The product is stable.
Reactivity : Highly reactive with alkalis.
Reactive with metals.
Slightly reactive to reactive with moisture.

Hazardous decomposition : These products are halogenated compounds, hydrogen chloride, hydrogen fluoride.

Section 11. Toxicological information

Potential acute health effects

**Eyes** : Corrosive to eyes.
**Skin** : Harmful if absorbed through the skin. Chronic low level exposure may result in mottling of teeth, joint stiffness, and weakening of bones (osteosclerosis). Corrosive to the skin.
**Inhalation** : Irritating to respiratory system.
**Ingestion** : Harmful if swallowed. Causes burns to mouth, throat and stomach.

Potential chronic health effects

**Chronic effects on humans** : Contains material which causes damage to the following organs: skin, eyes, bones, stomach, teeth. Chronic low level exposure may result in mottling of teeth, joint stiffness, and weakening of bones (osteosclerosis).

Section 12. Ecological information

Products of degradation : These products are halogenated compounds. Some metallic oxides.

Section 13. Disposal considerations

**Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Consult your local or regional authorities.

Section 14. Transport information

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Class</th>
<th>Packing group</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOT Classification</strong></td>
<td>UN3260</td>
<td>Corrosive solid, acidic, inorganic, n.o.s. (Sodium hydrogendifluoride, Sodium fluorosilicate)</td>
<td>8</td>
<td>II</td>
<td>Limited quantity</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Special provisions</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>IB8, IP2, IP4</td>
</tr>
</tbody>
</table>

**APPLIES ONLY DURING ROAD TRANSPORT**

Any variation of the shipping description based on the packaging is not addressed.
Section 15. Regulatory information

HCS Classification : Corrosive material
                    Target organ effects
U.S. Federal regulations : SARA 302/304/311/312 extremely hazardous substances: No products were found.
                     SARA 302/304 emergency planning and notification: No products were found.
TSCA 8(b) inventory : All materials are listed or exempt.
California Prop. 65 : No products were found.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>3</td>
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<tr>
<td>Fire hazard</td>
<td>0</td>
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<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Personal protection</td>
<td>C</td>
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</tbody>
</table>

Date of issue : 29-March-2006.
Responsible name : Regulatory Affairs
Date of previous issue : No previous validation.

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.