1. IDENTIFICATION

Product Identifier
Product Name Rustbuster

Other means of identification
SDS # E-027
UN/ID No UN1760

Recommended use of the chemical and restrictions on use
Recommended Use Cleaning agent.

Details of the supplier of the safety data sheet
Supplier Address Kleerwite Chemical
P.O. Box 32063
Henrico, VA. 23294

Emergency Telephone Number
Company Phone Number Phone: 877-553-3794
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance According to product specification
Physical State Liquid

Classification
Acute toxicity - Oral Category 4
Skin corrosion/irritation Category 1 Sub-category B
Serious eye damage/eye irritation Category 1

Signal Word Danger

Hazard Statements
Harmful if swallowed
Causes severe skin burns and eye damage
Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
Immediately call a poison center or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a poison center or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a poison center or doctor/physician
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium bifluoride</td>
<td>1341-49-7</td>
<td>10-15</td>
</tr>
</tbody>
</table>

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

General Advice
Provide this SDS to medical personnel for treatment.

Eye Contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Skin Contact
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician. Wash contaminated clothing before reuse.

Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

Ingestion
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Most important symptoms and effects

Symptoms
Harmful if swallowed. Causes severe skin burns and eye damage.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.
5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**
Not determined.

**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, protective equipment and emergency procedures**

**Personal Precautions**
Use personal protective equipment as required.

**Environmental Precautions**
See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

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

**Methods for Clean-Up**
Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on Safe Handling**
Handle in accordance with good industrial hygiene and safety practice. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing and eye/face protection.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**
Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up.

**Incompatible Materials**
None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**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>Ammonium bifluoride</td>
<td>TWA: 2.5 mg/m³ F</td>
<td>TWA: 2.5 mg/m³ F</td>
<td>TWA: 2.5 mg/m³ F</td>
</tr>
<tr>
<td></td>
<td>(vacated) TWA: 2.5 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxalic acid</td>
<td>STEL: 2 mg/m³</td>
<td>TWA: 1 mg/m³</td>
<td>IDLH: 500 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA: 1 mg/m³</td>
<td>(vacated) TWA: 1 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(vacated) STEL: 2 mg/m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Appropriate engineering controls**

**Engineering Controls**
Apply technical measures to comply with the occupational exposure limits.
Individual protection measures, such as personal protective equipment

- **Eye/Face Protection**: Refer to 29 CFR 1910.133 for eye and face protection regulations.
- **Skin and Body Protection**: Refer to 29 CFR 1910.138 for appropriate skin and body protection.

**General Hygiene Considerations**: Handle in accordance with good industrial hygiene and safety practice.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>According to product specification</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>

- **pH**: Not determined
- **Melting Point/Freezing Point**: Not determined
- **Boiling Point/Boiling Range**: Not determined
- **Flash Point**: Not determined
- **Evaporation Rate**: Not determined
- **Flammability (Solid, Gas)**: Not determined
- **Upper Flammability Limits**: Not determined
- **Lower Flammability Limit**: Not determined
- **Vapor Pressure**: Not determined
- **Vapor Density**: Not determined
- **Specific Gravity**: Not determined
- **Water Solubility**: Not determined
- **Solubility in other solvents**: Not determined
- **Partition Coefficient**: Not determined
- **Auto-ignition Temperature**: Not determined
- **Decomposition Temperature**: Not determined
- **Kinematic Viscosity**: Not determined
- **Dynamic Viscosity**: Not determined
- **Explosive Properties**: Not determined
- **Oxidizing Properties**: Not determined

### 10. STABILITY AND REACTIVITY

**Reactivity**: Not reactive under normal conditions.

**Chemical Stability**: Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**: None under normal processing.

**Conditions to Avoid**: Keep out of reach of children.

**Incompatible Materials**: None known based on information supplied.

**Hazardous Decomposition Products**: None known based on information supplied.
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

**Product Information**

**Eye Contact**
Causes severe eye damage.

**Skin Contact**
Causes severe skin burns.

**Inhalation**
Do not inhale.

**Ingestion**
Harmful if swallowed.

**Component Information**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium bifluoride</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1341-49-7</td>
<td>= 130 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Oxalic acid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>144-62-7</td>
<td>= 375 mg/kg (Rat)</td>
<td>= 20000 mg/kg (Rat)</td>
<td>-</td>
</tr>
</tbody>
</table>

**Information on physical, chemical and toxicological effects**

**Symptoms**
Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity**
Group 3 IARC components are "not classifiable as human carcinogens".

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium bifluoride</td>
<td></td>
<td>Group 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1341-49-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Legend**
*IARC (International Agency for Research on Cancer)*
Group 3 IARC components are "not classifiable as human carcinogens"

**Numerical measures of toxicity**
Not determined

12. ECOLOGICAL INFORMATION

**Ecotoxicity**
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Component Information**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxalic acid</td>
<td>4000: 24 h Lepomis macrochirus mg/L LC50 static</td>
<td>125 - 150: 48 h Daphnia magna mg/L EC50 Static</td>
<td></td>
<td></td>
</tr>
<tr>
<td>144-62-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Persistence/Degradability**
Not determined.

**Bioaccumulation**
Not determined.
### Mobility

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxalic acid</td>
<td>-0.81</td>
</tr>
<tr>
<td>144-62-7</td>
<td></td>
</tr>
</tbody>
</table>

**Other Adverse Effects**

Not determined

### 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods**

- **Disposal of Wastes**
  Disposal should be in accordance with applicable regional, national and local laws and regulations.

- **Contaminated Packaging**
  Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxalic acid</td>
<td>Toxic</td>
</tr>
<tr>
<td>144-62-7</td>
<td></td>
</tr>
</tbody>
</table>

### 14. TRANSPORT INFORMATION

**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

- **UN/ID No** UN1760
- **Proper Shipping Name** Corrosive liquid, n.o.s. (Ammonium bifluoride)
- **Hazard Class** 8
- **Packing Group** II

**IATA**

- **UN/ID No** UN1760
- **Proper Shipping Name** Corrosive liquid, n.o.s. (Ammonium bifluoride)
- **Hazard Class** 8
- **Packing Group** II

**IMDG**

- **UN/ID No** UN1760
- **Proper Shipping Name** Corrosive liquid, n.o.s. (Ammonium bifluoride)
- **Hazard Class** 8
- **Packing Group** II

### 15. REGULATORY INFORMATION

**International Inventories**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium bifluoride</td>
<td>Present</td>
<td>X</td>
<td></td>
<td>Present</td>
<td></td>
<td></td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**Legend:**

- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
US Federal Regulations

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium bifluoride</td>
<td>100 lb</td>
<td></td>
<td>RQ 100 lb final RQ</td>
</tr>
<tr>
<td>1341-49-7</td>
<td></td>
<td></td>
<td>RQ 45.4 kg final RQ</td>
</tr>
</tbody>
</table>

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium bifluoride - 1341-49-7</td>
<td>1341-49-7</td>
<td>10-15</td>
<td>1.0</td>
</tr>
</tbody>
</table>

CWA (Clean Water Act)
This product contains the following substances which are regulated 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>Ammonium bifluoride</td>
<td>100 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium bifluoride</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1341-49-7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxalic acid</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>144-62-7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Issue Date:** 01-Sep-2015  
**Revision Date:** 08-Sep-2015  
**Revision Note:** New format

### Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

*End of Safety Data Sheet*