1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name
SCALOX

Other means of identification
Product Code 239
UN/ID No. UN2967
Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use Inhibited acid cleaner.
Uses advised against PREVENT DISPERSION OF MISTS OR DUST!

Manufacturer Address
Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

Emergency telephone number
Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification
Acute toxicity - Oral Category 4
Skin corrosion/irritation Category 1
Serious eye damage/eye irritation Category 1
Corrosive to metals Category 1

Label elements

Emergency Overview

Danger

Hazard statements
Harmful if swallowed
Causes severe skin burns and eye damage
May be corrosive to metals

Appearance dry, free flowing granules
Physical state powder
Odor None

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
Keep only in original container
Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician
Specific treatment (see Section 4 on this label)
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: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Do NOT induce vomiting
Absorb spillage to prevent material damage

Precautionary Statements - Storage
Store locked up
Store in a corrosive resistant container.

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

Hazards not otherwise classified (HNOC)
Other Information
* Harmful to aquatic life with long lasting effects
Unknown Acute Toxicity 3% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfamic acid</td>
<td>5329-14-6</td>
<td>97</td>
<td></td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

First aid measures

**Eye contact**
Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete rinsing. Get immediate medical attention.

**Skin Contact**
Flush with water for 15 minutes. If irritation persists after rinsing, get medical attention. Remove contaminated clothing and wash before reuse.

**Inhalation**
Remove victim from immediate source of exposure to fresh air. If breathing is difficult, administer oxygen if available. If victim is not breathing, administer CPR. If individual experiences nausea, headache, or dizziness, get immediate medical attention.

**Ingestion**
Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to a semi-comatose, comatose, convulsing or unconscious person.

Most important symptoms and effects, both acute and delayed
Symptoms

Exposure to particulates or solution of this product may cause redness, pain and blurred vision. Prolonged contact may cause corneal injury. Can cause irritation of the skin with pain, itching and redness. Depending on the duration of skin contact, skin overexposures may cause chemical burns resulting in blistering of the skin and possible scarring. Repeated overexposure can result in dermatitis. Harmful if swallowed. May cause gastrointestinal irritation with symptoms such as nausea, vomiting, and diarrhea. May irritate the nose, throat, and respiratory tract. Symptoms include sore throat, coughing and shortness of breath. In severe cases, ulceration and perforation of the nasal septum and upper respiratory tract can occur as well as pulmonary edema that could lead to death.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Dry chemical. Foam. Carbon dioxide (CO2). Water spray (fog).

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical
If the stock solution container breaks, the solution should be handled with care as it is corrosive.

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, protective equipment and emergency procedures

Personal precautions
Evacuate nonessential personnel. Ventilate area. Wear appropriate personal protection equipment.

Environmental precautions
See Section 12 for additional ecological information.

Methods for containment
Completely contain spilled material with dikes or sand bags, etc.

Methods for cleaning up
Recover as much material as possible into containers for disposal or reuse. Remaining material may be diluted with water and neutralized. Flush spill area with water. Neutralization products, both solid and liquid, must be recovered for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wear appropriate protective clothing/equipment. Do not breathe dust. Use with adequate ventilation. Do not ingest.

Conditions for safe storage, including any incompatibilities
Storage Conditions
Keep containers tightly closed and properly labeled. Containers that have been emptied will
retain product residue and should be handled as if they were full. Store in a cool, dry,
well-ventilated place away from incompatible materials. Wash hands before eating,
drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or
consume foods, beverages, tobacco in areas where this product is stored.

Incompatible materials
Chlorine and chlorine compounds, ammonium chloride, nitric acid, cyanides, sulfides,
nitrites, nitrates, carbonates, metal oxides, strong oxidizing agents and strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Appropriate engineering controls
Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
If contact is anticipated, wear protective clothing appropriate to use conditions.

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.

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

Physical state
powder
Appearance
dry, free flowing granules
Color
white
Odor
None
Odor threshold
No information available

Property Values Remarks • Method
pH 1.3 1% Solution
Melting point/freezing point
No information available
Boiling point / boiling range
No information available
Flash point
No information available
Evaporation rate
No information available
Flammability (solid, gas)
No information available
Flammability Limit in Air
Upper flammability limit: No information available
Lower flammability limit: No information available
Vapor pressure
No information available
Vapor density
No information available
Specific Gravity
No information available
Water solubility
Soluble in water
Solubility in other solvents
No information available
Partition coefficient
No information available
Autoignition temperature
No information available
Decomposition temperature
No information available
Kinematic viscosity
No information available
Dynamic viscosity
No information available
239 SCALOX

Explosive properties  No information available
Oxidizing properties  No information available

Other Information

Softening point  No information available
Molecular weight  No information available
VOC Content (%)  No information available
Density  No information available
Bulk density  No information available

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Extremes of temperature and direct sunlight.

Incompatible materials
Chlorine and chlorine compounds, ammonium chloride, nitric acid, cyanides, sulfides, nitrites, nitrates, carbonates, metal oxides, strong oxidizing agents and strong bases.

Hazardous Decomposition Products

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information  No data available

Inhalation
Inhalation of vapors in high concentration may cause irritation of respiratory system.

Eye contact
Corrosive to the eyes and may cause severe damage including blindness.

Skin Contact
Contact causes severe skin irritation and possible burns.

Ingestion
Harmful if swallowed.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfamic acid</td>
<td>= 1450 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5329-14-6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms  No information available.

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

Sensitization  No information available.
Germ cell mutagenicity  No information available.
Carcinogenicity  No information available.
Reproductive toxicity  No information available.
STOT - single exposure  No information available.
STOT - repeated exposure  No information available.
Aspiration hazard
No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity
3% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document.
ATEmix (oral) 1495 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity
3% of the mixture consists of component(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfamic acid</td>
<td>-</td>
<td>14.2: 96 h Pimephales promelas mg/L LC50 static</td>
<td>-</td>
</tr>
<tr>
<td>5329-14-6</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Other adverse effects
No information available

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
Do not reuse container.

14. TRANSPORT INFORMATION

DOT

UN/ID No. UN2967
Proper shipping name Sulfamic Acid
Hazard Class 8
Packing Group III

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Complies
IECSC  Complies
KECL  Complies
PICCS  Complies
AICS  Complies

Legend:
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 Chemical Substances/European 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

US 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

<table>
<thead>
<tr>
<th></th>
<th>Acute health hazard</th>
<th>Chronic Health Hazard</th>
<th>Fire hazard</th>
<th>Sudden release of pressure hazard</th>
<th>Reactive Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

CWA (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

US State Regulations

California Proposition 65
This product does not contain any 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>
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</thead>
<tbody>
<tr>
<td>Sulfamic acid 5329-14-6</td>
<td>X</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

U.S. EPA Label Information
EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
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<tr>
<td></td>
<td>3</td>
<td>0</td>
<td>0</td>
<td></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>3</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

Prepared By: lmt
Issue Date: 06-Jan-2015
Revision Date: 06-Jan-2015
Revision Note: No information available
Disclaimer
The information provided in this Material 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