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

GHS product identifier

Product Name SIMAZINE 4L

Other means of identification

EPA Reg. No.: 9779-296
Product ID/Unity Item No.: 10000777, 10012975, 10014720, 10128018

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Agricultural Insecticide- See product label for complete list of uses and sites.

Uses advised against See product label for information regarding restriction on the use of this product.

Supplier's details

Supplier Address Winfield Solutions, LLC.
P.O. Box 64589
St. Paul, MN 55164-0589

For Non-Emergency Business Inquiries:
1-855-494-6343 Mon-Fri, 8am-5pm CST

Emergency telephone number

Emergency Telephone Number FOR MEDICAL EMERGENCY: 1-877-424-7452 (24hrs)
FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL: CHEMTREC 1-800-424-9300 (24 hours)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

<table>
<thead>
<tr>
<th>Acute Inhalation Toxicity - Dusts and Mists</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 2B</td>
</tr>
<tr>
<td>Specific Target Organ Toxicity (Repeated Exposure)</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

GHS Label elements, including precautionary statements

Continued on next page
### Emergency Overview

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Statements</td>
<td></td>
</tr>
<tr>
<td>• Harmful if inhaled</td>
<td></td>
</tr>
<tr>
<td>• Causes eye irritation</td>
<td></td>
</tr>
<tr>
<td>• May cause damage to organs through prolonged or repeated exposure</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Physical State</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>White to off-white.</td>
<td>Liquid.</td>
<td>No distinct odor</td>
</tr>
</tbody>
</table>

#### Precautionary Statements

**Prevention**
- Use only outdoors or in a well-ventilated area.
- Wash face, hands and any exposed skin thoroughly after handling.
- Do not breathe mist, vapors or spray.

**General Advice**
- Get medical attention/advice if you feel unwell

**Eyes**
- **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **If eye irritation persists:** Get medical advice/attention.

**Inhalation**
- **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- **Call a POISON CENTER or doctor/physician if you feel unwell.**

**Storage**
- None

**Disposal**
- Dispose of contents/container to an approved waste disposal plant.

### Hazard Not Otherwise Classified (HNOC)
Not applicable.

### Other information
May be harmful if absorbed through skin.
Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

0% of the mixture consists of ingredient(s) of unknown toxicity.
3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms
None

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Trade secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simazine</td>
<td>122-34-9</td>
<td>41.9</td>
<td>*</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1</td>
<td>1-5</td>
<td>*</td>
</tr>
<tr>
<td>Nonylphenol ethoxylate</td>
<td>127087-87-0</td>
<td>1-5</td>
<td>*</td>
</tr>
</tbody>
</table>

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

4. FIRST AID MEASURES

**Description of necessary first-aid measures**

**Eye Contact**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin Contact**
Wash skin with soap and water. Get medical attention if symptoms occur.

**Inhalation**
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if exposed or you feel unwell.

**Ingestion**
Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.

**Most important symptoms/effects, acute and delayed**

**Most Important Symptoms/Effects**
Eye irritation/reactions.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to Physician**
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Dry chemical, carbon dioxide (CO₂), alcohol-resistant foam or water spray.

**Unsuitable Extinguishing Media**
Do not use straight streams.

**Specific Hazards Arising from the Chemical**
Thermal decomposition can lead to release of irritating gases and vapors.

**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**
Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear protective gloves/clothing and eye/face protection. Refer to Section 8.

*Continued on next page*
Environmental Precautions

Do not allow spilled product to enter sewers or waterways. Collect spillage. Dispose of contents/container to an approved waste disposal plant. See Section 12 for additional Ecological Information. Avoid release to the environment.

Methods and materials for containment and cleaning up

Methods for Containment
Prevent further leakage or spillage if safe to do so. Dike far ahead of spill; use dry sand to contain the flow of material.

Methods for Cleaning Up
Prevent product from entering drains. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling
Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapors or spray. Remove and wash contaminated clothing separately before re-use.

Conditions for safe storage, including any incompatibilities

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from children, food or feed products.

Incompatible Products

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

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>Simazine 122-34-9</td>
<td>TWA: 0.5 mg/m^3 inhalable fraction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ethylene glycol 107-21-1</td>
<td>Ceiling: 100 mg/m^3 aerosol only (vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m^3</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Measures
Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Safety glasses with side shields or safety goggles.

Skin and Body Protection
Impervious clothing. Impervious gloves.

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.

NOTE TO END USERS: Personal protection equipment (PPE) and clothing listed in this section is for manufacturing, commercial blending and packaging workers. Applicators and handlers should refer to the pesticide product label for proper personal protective equipment and clothing.

Continued on next page
Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Provide regular cleaning of equipment, work area and clothing. Remove and wash contaminated clothing and gloves, including the inside, separately before re-use.

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>Odor</td>
<td>No distinct odor.</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>White to off-white.</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>6 - 8</td>
<td>None known</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not flammable.</td>
<td>None known</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>upper flammability limit</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>lower flammability limit</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.139</td>
<td>at 20 °C</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Dispersible</td>
<td>None known</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammable Properties</td>
<td>Not flammable</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Other information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Continued on next page
### Conditions to avoid

Excessive heat. Do not store near heat or flames.

### Incompatible materials


### Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors: Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NOx). Sulfur oxides.

### 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information**

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Harmful if inhaled.</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>Causes eye irritation.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>May be harmful if absorbed through skin.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Not expected to be toxic following ingestion.</td>
</tr>
</tbody>
</table>

#### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms**

Contact with the eyes may cause discomfort or pain with marked redness and swelling of the conjunctiva. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

| Sensitization | Negative in Guinea Pig Maximization test. |
| Mutagenic Effects | Does not contain substances that are known or suspected to be mutagens. |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simazine</td>
<td>A3</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**ACGIH:** (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

**IARC:** (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to its Carcinogenicity to Humans

**Reproductive Toxicity**

No information available.

**STOT - single exposure**

None of the ingredients are known to cause specific target organ effects from a single exposure.

**STOT - repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

**Target Organ Effects**


**Aspiration Hazard**

None of the ingredients are known to be an aspiration hazard.

**Numerical measures of toxicity - Product**

**Acute Toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity.

**LD50 Oral**

> 5000 mg/kg; (rat)

**LD50 Dermal**

> 2000 mg/kg; (rabbit)

**Inhalation dust/mist**

1.86 mg/L; (rat, 4 hr)
12. ECOLOGICAL INFORMATION

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicty to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simazine 122-34-9</td>
<td>LC50 96 h: &gt; 10 mg/L static (Oncorhynchus mykiss)</td>
<td>LC50 96 h: 3.5 - 7.15 mg/L static (Pimephales promelas) LC50 96 h: = 56 mg/L (Oncorhynchus mykiss) LC50 96 h: = 82 mg/L semi-static (Oncorhynchus mykiss) LC50 96 h: = 118 mg/L (Lepomis macrochirus) LC50 96 h: = 9.9 - 26 mg/L static (Lepomis macrochirus) LC50 96 h: = 49 mg/L static (Poecilia reticulata)</td>
<td>EC50 48 h: 0.56 - 2.2 mg/L Static (Daphnia magna)</td>
<td></td>
</tr>
<tr>
<td>Ethylene glycol 107-21-1</td>
<td>EC50 96 h: 6500 - 13000 mg/L (Pseudokirchneriella subcapitata)</td>
<td>LC50 96 h: = 41000 mg/L (Oncorhynchus mykiss) LC50 96 h: = 14 - 18 mL/L static (Oncorhynchus mykiss) LC50 96 h: = 27540 mg/L static (Lepomis macrochirus) LC50 96 h: = 40761 mg/L static (Oncorhynchus mykiss) LC50 96 h: = 40000 - 60000 mg/L static (Pimephales promelas) LC50 96 h: = 16000 mg/L static (Poecilia reticulata)</td>
<td>EC50 48 h: 46300 mg/L (Daphnia magna)</td>
<td></td>
</tr>
<tr>
<td>Nonylphenol ethoxylate 127087-87-0</td>
<td>LC50 (96hr): 3.8 - 6.2 mg/l (Pimephales promelas)</td>
<td>IC50 (16hr): &gt;1000 mg/L (Bacteria)</td>
<td>EC50 (48hr): 9.3 - 21.4 mg/L</td>
<td></td>
</tr>
</tbody>
</table>

Persistence and Degradability
No information available.

Bioaccumulation

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simazine</td>
<td>2.18</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>-1.93</td>
</tr>
<tr>
<td>Nonylphenol ethoxylate</td>
<td>2.1 - 3.4</td>
</tr>
</tbody>
</table>

Other Adverse Effects
No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging
Do not re-use empty containers.
14. TRANSPORT INFORMATION

DOT
Not Regulated.

15. REGULATORY INFORMATION

International Inventories
TSCA Exempt

Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

U.S. Federal Regulations
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>Simazine</td>
<td>122-34-9</td>
<td>41.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1</td>
<td>1-5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories
- Acute Health Hazard: Yes
- Chronic Health Hazard: Yes
- Fire Hazard: No
- Sudden Release of Pressure Hazard: No
- Reactive 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, 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>Extremely Hazardous Substances RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>5000 lb</td>
<td></td>
<td>RQ 5000 lb final RQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RQ 2270 kg final RQ</td>
</tr>
</tbody>
</table>

U.S. State Regulations

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>California Prop. 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1</td>
<td>Developmental</td>
</tr>
</tbody>
</table>

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simazine</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

U.S. EPA Label Information
EPA Pesticide Registration Number 9779-296
Difference between SDS and EPA Pesticide label
This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION. Caused moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2*</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

*Indicates a chronic health hazard.

Prepared By
Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Revision Date
22-Jun-2016

Supersedes Document Dated
14-Sept-2007

Revision Note
All sections revised.

General Disclaimer
The information provided on this SDS 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 Safety Data Sheet