1. IDENTIFICATION

Product Identifier

Product Name

Florasulam 50 SC

Other means of identification

SDS #

ADAMA-267

Registration Number(s)

Pest Control Product Reg. No. 30814
UN3077

Recommended use of the chemical and restrictions on use

Recommended Use

Herbicide.

Details of the supplier of the safety data sheet

Manufacturer Address

ADAMA Agricultural Solutions Canada Ltd.
300 – 191 Lombard Avenue
Winnipeg, Manitoba R3B 0X1
1-855-264-6262

Emergency Telephone Number

Emergency Telephone (24 hr)

For fire, spill and/or leak contact INFOTRAC:
1-800-535-5053 (North America) 1-352-323-3500 (International)
For medical emergencies and health/safety inquiries, contact ProPharma Group:
1-877-250-9291

2. HAZARDS IDENTIFICATION

This chemical is a product registered by the Canadian Pest Control Products Act and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-PCPA registered chemicals. Please see Section 15 for additional information. This product has been classified according to Canada’s Hazardous Product Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

Appearance

Opaque, white liquid

Physical state

Liquid

Odor

Odorless

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)/Canada’s Hazardous Product Regulations (WHMIS 2015). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

Other hazards

Very toxic to aquatic life with long lasting effects
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florasulam</td>
<td>145701-23-1</td>
<td>4.83</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>57-55-6</td>
<td>5.82</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**
If poisoning is suspected, immediately contact a physician or a poison control centre. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**Eye Contact**
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eyes wide open while rinsing. If symptoms persist, call a physician.

**Skin Contact**
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.

**Inhalation**
Move person to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

**Ingestion**
Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give by mouth to an unconscious person.

**Most important symptoms and effects**

**Symptoms**
None known.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician**
There is no specific antidote if this product is ingested. 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**
No information available.

**Specific Hazards Arising from the Chemical**
No specific hazard known.

**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. In the event of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

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

**For Emergency Responders**
Use personal protection recommended in Section 8.
Environmental precautions

Environmental precautions
See Section 12 for additional Ecological Information. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for Containment
Prevent further leakage or spillage if safe to do so. Prevent from entering drains, sewers, streams or other bodies of water. If runoff occurs, notify authorities as required. Do not let product enter drains.

Methods for Clean-Up
Take up mechanically. Place in appropriate containers for disposal. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling
Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Use personal protective equipment as required. Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials
None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls
Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Tight sealing safety goggles.

Skin and Body Protection
Suitable protective clothing.

Respiratory Protection
Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations
When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Appearance</th>
<th>Color</th>
<th>Odor</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>Opaque white liquid</td>
<td>White</td>
<td>Odorless</td>
<td>Not determined</td>
</tr>
<tr>
<td>Property</td>
<td>Values</td>
<td>Remarks • Method</td>
<td></td>
<td></td>
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<tr>
<td>--------------------------------------</td>
<td>-------------------------</td>
<td>------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>4.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>99.7°C / 211.46°F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limit</td>
<td>Not determined</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative Density</td>
<td>Not determined</td>
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</tr>
<tr>
<td>Water Solubility</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
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<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
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<td></td>
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<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
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<td></td>
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</tr>
<tr>
<td>Explosive Properties</td>
<td>Not an explosive</td>
<td></td>
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<td></td>
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<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
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<tr>
<td>Other Information</td>
<td></td>
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</tr>
<tr>
<td>Bulk Density</td>
<td>1.035 g/ml</td>
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</tr>
</tbody>
</table>

### 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**
Heat, flames and sparks.

**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**

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Contact</td>
<td>Avoid contact with eyes.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Avoid contact with skin.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Do not inhale.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Do not ingest.</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

Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

Acute Oral LD50 (Rat): >2,000 mg/kg
Acute Dermal LD50 (Rat): >2,000 mg/kg
Acute Inhalation LC50 (Rat): >5.6 mg/L
Eye Irritation: Minimally irritating
Dermal Irritation: Non-irritating
Dermal Sensitization: Not a contact sensitizer

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects and non-target terrestrial plants.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol</td>
<td>19000: 96 h Pseudokirchneriella subcapitata mg/L EC50</td>
<td>51600: 96 h Oncorhynchus mykiss mg/L LC50 static 41 - 47: 96 h</td>
<td>1000: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oncorhynchus mykiss mL/L LC50 static 710: 96 h Pimephales promelas mg/L LC50 51400: 96 h Pimephales promelas mg/L LC50 static</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Persistence/Degradability

Not readily biodegradable.

Bioaccumulation

Not determined.

Mobility

Not determined.

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. Waste codes should be assigned by the user based on the application for which the product was used.

Contaminated Packaging

Improper disposal or reuse of this container may be dangerous and illegal.

14. TRANSPORT INFORMATION

DOT

UN/ID No: UN3082
Proper Shipping Name: Environmentally hazardous liquid, solid, n.o.s. (Florosulam)
Hazard Class: 9
Packing Group: III
Marine Pollutant: Yes.

IATA
- UN/ID No: UN3082
- Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Florasulam)
- Hazard Class: 9
- Packing Group: III
- Marine Pollutant: Yes

IMDG
- UN/ID No: UN3082
- Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Florasulam)
- Hazard Class: 9
- Packing Group: III
- Marine Pollutant: Yes

TDG
- UN/ID No: UN3082
- Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Florasulam)
- Hazard Class: 9
- Packing Group: III
- Special Provisions: Yes

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florasulam</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</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
- **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
- Not applicable

US State Regulations

U.S. State Right-to-Know Regulations
- Not Applicable

Pesticide Registration Number
- Pest Control Product Reg. No. 30814

Pest Control Product Statement
This chemical is a product registered by the Canadian Pest Control Products Act and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-PCPA registered chemicals. Read the approved label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.
Product Label
Read the label and pamphlet before using
Keep out of reach of children

Difference between SDS and product label

<table>
<thead>
<tr>
<th></th>
<th>PCPA</th>
<th>SDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal Word</td>
<td>Caution-Poison</td>
<td>NONE</td>
</tr>
<tr>
<td>Eye Damage</td>
<td>May cause slight eye irritation</td>
<td>N/A</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>1</td>
<td>1</td>
<td>0</td>
<td>Not determined</td>
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</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>
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</table>

Revision Date: 06-Nov-2018
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