



VOLTA® Agricultural Herbicide

Safety Data Sheet

Revision date: May 24, 2015

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : VOLTA® Agricultural Herbicide
CAS No. : 79277-27-3 (active ingredient)
EPA Registration Number : 83100-9-83979

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/preparation : Agriculture Herbicide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Rotam North America, Inc.
4900 Koger Blvd. Suite# 140
Greensboro, NC 27407
Phone: 1-(866) 927-6826 (toll free); 1-(336) 346-8802
msds@rotam.com

1.4. Emergency telephone number

Emergency numbers : 1-800-858-7378 (NPIC)
1-800-222-1222 (Poison Control Center)
(800)-424-9300, (703)-527-3887 (CHEMTREC)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

<u>Hazard Class</u>	<u>Category</u>	<u>Hazard Statement</u>
Aquatic Toxicity (Acute)	1	H400
Aquatic Toxicity (Chronic)	1	H410

If applicable, full text of H-phrases appear in "Label elements" below

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labeling

Hazard pictograms :



GHS09

Signal word : Warning
Hazard statements : H410 – Very toxic to aquatic life with long lasting effects
Precautionary statements (prevention) : P273 - Avoid release to the environment
Precautionary statements : P391 – Collect spillage

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(response)

Precautionary statements (disposal) : P501 – Dispose of contents/container in accordance with federal, state and local regulations.

2.3. Other hazards/labeling information

Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

SECTION 3: Composition/information on ingredients

Name	Product identifier	%/wt.
Thifensulfuron-methyl	(CAS No.) 79277-27-3	75
Other Ingredients	N/A	25

SECTION 4: First aid measures

4.1. Description of first aid measures

IF INHALED	: Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice if irritation develops or persists.
IF IN EYES	: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call poison control center or doctor for treatment advice if irritation develops or persists.
IF SWALLOWED	: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person
First-aid measures – general	: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. See Label for Additional Precautions and Directions for Use.
Notes to Physician	: There is no specific antidote. Treat symptomatically

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water, dry chemical powder, foam, carbon dioxide (CO ₂).
Unsuitable extinguishing media	: High volume water jet. (Water contamination risk from runoff)

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Hazardous decomposition products may be released during prolonged heating like dense smoke, carbon monoxide and dioxide, nitrogen oxides (NO _x), and sulfur oxides (SO _x).
Explosion hazard	: Product is not explosive.
Reactivity	: The product is stable at normal handling and storage conditions.

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5.3. Advice for firefighters

Precautionary measures fire : In the event of fire, wear self-contained breathing apparatus. Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Dike area to prevent runoff and contamination of water sources. Equipment or materials involved in pesticide fires may become contaminated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Wear appropriate personal protective equipment (PPE): coveralls, gloves, and boots. Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations. Prevent material from entering sewers, waterways, or low areas. Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

6.1.1. For non-emergency personnel

Protective equipment : Wear appropriate personal protective equipment (PPE): coveralls, gloves, and boots.

Emergency procedures : Avoid contact with spilled material. Do not allow product to enter streams, sewers or other waterways.

6.1.2. For emergency responders

Protective equipment : Wear appropriate personal protective equipment (PPE): coveralls, gloves, and boots.

6.2. Environmental precautions

This pesticide is toxic to estuarine and marine invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirement of a National Pollutant Discharge Elimination System (NPDES) permit and permitting authority has been notified in writing prior to the discharge. Do not discharge effluent containing the product to sewer system without previously notifying the local sewage treatment plant authority. For guidance contact your local state water board or regional office of the EPA.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing. Do not allow children or pets to enter the treated area until it has dried.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a cool, dry secure place away from food, drink, and feeding. Keep out of direct sunlight. If spilled, do not flush to waterways (see Environmental Hazards). Carefully collect and contain spilled material in a manner that produces the least amount of airborne dust.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Personal protective equipment

Train employees in safe use of the product. Follow all label instructions. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

Applicators and other handlers must wear:

Long sleeved shirt and long pants; Chemical-resistant gloves (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber); Safety glasses or goggles; NIOSH/MSHA-approved dust mask should be used when dusts are generated during handling; Shoes plus socks.

PPE required for early entry to treated areas that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls. Chemical-resistant gloves, (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber), all greater than or equal to 14 mils. Shoes plus socks

8.2. Exposure controls

Ensure adequate ventilation, especially in confined areas

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Color	: Off-white granule
Odor	: No discernible odor
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (n-butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: Decomposes
Flash point	: No data available
Auto ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not flammable
Vapor pressure	: No data available

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Relative vapor density at 20 °C	: No data available
Relative density	: 0.688-0.699
Solubility	: Soluble (@25 °C in Water)
Log Pow	: 1.06 (at pH 5 – active ingredient)
Log Kow	: -1.7 (at pH 7 – active ingredient)
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: Not oxidizing
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable at normal handling and storage conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not applicable.

10.4. Conditions to avoid

Direct sunlight, excessive heat and flame.

10.5. Incompatible materials

Strong acids, strong bases and oxidizers.

10.6. Hazardous decomposition products

Hazardous decomposition products may be released during prolonged heating such as dense smoke, carbon monoxide and dioxide, nitrogen oxides (NO_x), and sulfur oxides (SO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

VOLTA® Agricultural Herbicide	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5050 mg/kg
LC50 inhalation rat (Dust)	>5.18 mg/l/4h

Skin corrosion/irritation	: Not classified Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Not classified Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	: Not classified Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met

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Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Thifensulfuron	
Fish - LC50(96h)	>100 mg/L (<i>Rainbow Trout and Bluegill Sunfish</i>)
Bees – LC50, oral	>7.1 ug/bee (<i>Apis mellifera</i>)
Invertebrates - EC50(48h)	470 mg/L (<i>Daphnia magna</i>)
Green Algae - ErC50(72h)	0.0159 mg/L (<i>S. capricornutum</i>)
Duckweed – EC50	1.3 ug/L (<i>Lemna gibba</i>)

This pesticide is toxic to estuarine and marine invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirement of a National Pollutant Discharge Elimination System (NPDES) permit and permitting authority has been notified in writing prior to the discharge. Do not discharge effluent containing the product to sewer system without previously notifying the local sewage treatment plant authority. For guidance contact your local state water board or regional office of the EPA

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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- Waste disposal : Open dumping is prohibited. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance..
- Container disposal : **Non-refillable Plastic Containers:** Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Contact your state regulatory agency to determine allowable practices in your state. Offer for recycling, or puncture and dispose of in a sanitary landfill, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Consult product label for additional container disposal instructions.

SECTION 14: Transport information

Ground transport

Not Regulated by US DOT
Not Regulated by Canadian TDG

IMDG / ICAO / IATA

14.1. UN number

UN-No. : 3077

14.2. UN proper shipping name

Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Thifensulfuron-methyl)

Transport document description : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Thifensulfuron-methyl), 9, III

14.3. Transport hazard class/classes

Class : 9

Hazard labels : 9



14.4. Packing group

Packing group : III

14.5. Environmental hazards

Dangerous for the environment :



Marine Pollutant : Yes

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SECTION 15: Regulatory information

FIFRA Information:

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:

Signal word : **CAUTION**
Hazard statements : Causes moderate eye irritation.
Precautionary statements : Avoid contact with eyes or clothing.

SARA 313 Regulated Chemical(s): None

Title III hazard classification:

Acute Health Hazard: Yes
Chronic Health Hazard: Yes
Fire: No
Reactivity/Physical hazard: No
Pressure: No

Canadian Regulatory Information:

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. WHMIS Classification: D2B – Toxic



SECTION 16: Other information

NFPA: Health: 1; Flammability: 1; Reactivity: 0; Specific:
HMIS: Health: 1; Flammability: 1; Physical Hazard: 0; PPE: E

US SDS-GHS

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