



## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Formulator:** Gowan Company  
P.O. Box 5569  
Yuma, Arizona 85366-5569  
(928) 783-8844

**Emergency Phone:** (928) 783-3803  
**For 24-Hour Emergency Assistance (Spill, Leak, Fire, or Exposure), Call CHEMTREC®:** **Inside the U.S.:** (800) 424-9300  
**Outside the U.S.:** (703) 527-3887  
(888) 478-0798

**For Medical Emergency:**

**Product:** Unity™ WDG Herbicide  
**EPA Signal Word:** Caution  
**Active Ingredient:** Thifensulfuron Methyl (75%)  
**Chemical Name:** Methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl) amino]carbonyl]amino]sulfonyl]-2-thiophenecarboxylate  
**Chemical Class:** Sulfonylurea

**EPA Registration No.:** 10163-294  
**CAS No.:** 79277-27-3

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

CAUTION! Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

#### Potential Health Effects (based on animal data)

- Skin contact with Thifensulfuron Methyl may cause skin irritation with discomfort or rash. Significant skin permeation, and systemic toxicity, after contact appears unlikely. There are no reports of human skin sensitization.
- Eye contact with Thifensulfuron Methyl may cause eye irritation with discomfort, tearing, or blurring of vision.
- Inhalation of Thifensulfuron Methyl may cause irritation of the upper respiratory passages, with coughing and discomfort.

#### Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Thifensulfuron Methyl (75%)	None Established	None Established	N/A	No

Only the identities of the active ingredient(s) and any *hazardous* inert ingredients are listed. Specific information on all of this product's ingredients can be obtained by the treating medical professional or spill emergency responder for the management of exposures, spills, or safety assessments.

### 4. FIRST AID MEASURES

<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or physician, or going for treatment. You may also contact 1-888-478-0798 for emergency medical treatment information.	

**IN ALL CASES OF SUSPECTED POISONING, GET MEDICAL ATTENTION IMMEDIATELY.**

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## 5. FIRE FIGHTING MEASURES

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### Flammable Properties

Thifensulfuron Methyl - LEL: 0.10 - 0.25 g/l

### Fire and Explosion Hazards:

- Not a fire or explosion hazard.

### Extinguishing Media

- Use media appropriate for surrounding material.

### Fire Fighting Instructions

- Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment.

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## 6. ACCIDENTAL RELEASE MEASURES

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### NOTE:

Review FIRE FIGHTING MEASURES and HANDLING sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus

### Accidental Release Measures

Shovel or sweep up. Place in closed containers for disposal. DO NOT RAISE DUST

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## 7. HANDLING AND STORAGE

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### Handling

Do not breathe dust. Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. Wash clothing after use. Do not store or consume food, drink, or tobacco in areas where they may become contaminated with this material.

**USER SHOULD:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

### Storage

Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Engineering Controls

Use only with adequate ventilation. Keep container tightly closed. Do not generate dust.

### Personal Protective Equipment

Always follow label instructions when using this product. Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical Resistant Gloves Category A (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber) all equal to or greater than 14 mils.
- Shoes plus socks.

**Follow manufacturer's instructions for cleaning and maintaining personal protective equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.**

**PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:**

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

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Physical Data

<b>Odor:</b>	None
<b>Form:</b>	Solid granules
<b>Color:</b>	Dark brown
<b>Bulk Density:</b>	0.61 - 0.70 g/ml

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## 10. STABILITY AND REACTIVITY

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### Chemical Stability

Stable at normal temperatures and storage conditions

### Incompatibility with other materials

None reasonably foreseeable

### Decomposition

Decomposition will not occur

### Polymerization

Polymerization will not occur

### Other Hazards

The hazardous reactivity of this material is unknown. DO NOT expose to heat, flame, or extreme temperatures.

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## 11. TOXICOLOGICAL INFORMATION

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### Animal Data

#### Thifensulfuron Methyl

Inhalation 4 hour LC<sub>50</sub>: > 7.9 mg/L in rats (Very low toxicity by inhalation)

Skin absorption LD<sub>50</sub>: > 2000 mg/kg in rabbits (Slightly to moderately toxic by contact)

Oral LD<sub>50</sub>: > 5000 mg/kg in rats (Very low toxicity by ingestion)

Thifensulfuron Methyl is a slight skin irritant, and is a moderate eye irritant, but is not a skin sensitizer in animals.

The effects in animals from short inhalation exposure to Thifensulfuron Methyl include nonspecific effects such as weight loss and irritation when compared to the control group.

Repeated ingestion exposures to Thifensulfuron Methyl caused decreased body and organ weights and some blood chemistry changes, including increased blood urea nitrogen and decreased protein and globulins. Long-term exposures caused an increase in liver and gall bladder weights, decreased body weight gain, and a decreased level of sodium in the blood when compared to the control group.

No carcinogenic effects were observed in animal tests with Thifensulfuron Methyl. Animal data show developmental effects only at exposure levels producing toxic effects in the adult animal. Tests in animals demonstrate no reproductive toxicity. Thifensulfuron Methyl does not produce genetic damage in bacterial or mammalian cell cultures or animals.

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## 12. ECOLOGICAL INFORMATION

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### Ecotoxicological Information

#### AQUATIC TOXICITY:

96 hour LC50 - Rainbow trout: > 100 mg/L.

96 hour LC50 - Bluegill sunfish: > 100 mg/L.

#### AVIAN TOXICITY:

Acute Oral LD50 - Mallard Duck: > 2510 mg/kg.

Acute Dietary LC50 - Mallard Duck: > 5620 mg/kg.

Acute Dietary LC50 - Bobwhite Quail: > 5620 mg/kg.

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## 13. DISPOSAL CONSIDERATION

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### Waste Disposal

Do not contaminate water, food, or feed by disposal. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

### ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinseate.

### Container Disposal

**For Plastic Containers:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**For Fiber Sacks:** Completely empty fiber sack by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into manufacturing or application equipment. Then dispose of sack in a sanitary landfill or by incineration if allowed by State and local authorities.

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### 13. DISPOSAL CONSIDERATION - continued

**For Fiber Drums with Liners:** Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

**For Bags Containing Water-Soluble Packets:** Do not reuse the outer box or the resealable plastic bag. When all water-soluble packets are used, the outer packaging should be clean and may be disposed of in a sanitary landfill or by incineration, or if allowed by State and local authorities, by open burning. If burned, stay out of smoke. If the resealable plastic bag contacts the formulated product in any way, the bag must be triple-rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer wrap as described above.

**For Metal Containers (non aerosol):** Triple rinse (or equivalent) the container. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

**For Paper and Plastic Bags:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

### 14. TRANSPORT INFORMATION

**DOT Classification**

Not regulated

**IMDG Classification**

Not regulated

**IATA Classification**

Not regulated

### 15. REGULATORY INFORMATION

**SARA Title III Classification**

Section 302/304:

Not listed

Section 311/312:

Immediate (acute) health hazard

Section 313 chemical(s):

Not listed

**Proposition 65**

Not applicable

**CERCLA Reportable Quantity (RQ)**

Not applicable

**RCRA Classification**

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

**TSCA Status**

Exempt from TSCA

### 16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 1  
Flammability: 0  
Reactivity: 0

0	Least
1	Slight
2	Moderate
3	High
4	Severe

**Notice:** The information and recommendations contained herein are provided in good faith and are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

**Prepared By:**

Gowan Company  
(928) 783-8844

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