

AgriSOLUTIONS

MATERIAL SAFETY DATA SHEET

DAZE 4SC

EPA Reg. No. 1381-212
Effective Date: 09/13/07

Supersede date:

1. Substance/preparation and company identification

<u>Company</u> Winfield Solutions, LLC P.O. Box 64589 St. Paul, MN 55164-0589	<u>24 Hour Emergency Response Information</u> CHEMTREC (800) 424-9300 Medical Emergency Information: 877-424-7452
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Molecular formula: C₉H₈N₄OS (Thidiazuron)
Molecular weight: 220.2
Chemical family: Pyridine herbicide
Synonyms: 1-phenyl-3-(1,2,3-thiadiazole-5-yl) urea

2. Composition/information on ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
51707-55-2	42.4	Thidiazuron
57-55-6	5.0	Propylene Glycol
	52.6	Inert ingredients

3. Hazard Identification

Emergency Overview

- May be fatal if swallowed, inhaled or absorbed through skin.
- Causes severe eye irritation.
- Avoid breathing vapor or spray mist.
- Avoid contact with eyes, skin or clothing.
- Keep out of reach of children.

Causes burns to the skin and irreversible eye damage. May be fatal if swallowed, inhaled, or absorbed through the skin. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor or spray mist.

Symptoms of over exposure are headaches, dizziness, nausea, vomiting, cramps, weakness, blurred vision, pin point pupils, tightness in chest, labored breathing, nervousness, sweating, watering of eyes, drooling, muscle spasms and coma.

Potential health effects

See Product Label for additional precautionary statements.

Primary routes of exposure

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

EYE – Corrosive to the eyes. If not removed promptly, will injure eye tissue, which may result in permanent damage. Degree of injury will depend on the amount of material that gets into eye and the speed and thoroughness of the first aid treatment.

SKIN – Severely irritating to the skin. Harmful if absorbed through the skin. Large exposures could be fatal.

INHALATION – Vapor or spray mists concentrations may be harmful if inhaled. High concentrations may be fatal.

INGESTATION – May be harmful or fatal if swallowed.

Potential environmental effects

Aquatic toxicity:
Very toxic (acute effect) to aquatic organisms.

Terrestrial toxicity:
Acutely harmful to terrestrial organisms.

4. First aid measures

General advice:

First aid providers should wear personal protective equipment to prevent exposure. Remove contaminated clothing. Move person to fresh air. If person is not breathing, call 911 or ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or physician for treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

If inhaled:

Remove the affected individual into fresh air and keep the person calm.

If on skin:

Rinse skin immediately with plenty of water for 15-20 minutes.

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

If swallowed:

Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting. Have person sip a glass of water if able to swallow.

Note to Physician

Hazards: Probably mucosal damage may contraindicate use of gastric lavage.

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote. If large amounts have been ingested and patient is seen within an hour of ingestion, gastrointestinal decontamination should be considered.

5. Fire-fighting measures

Flash point: >93°C

Suitable extinguishing media:

Foam, dry extinguishing media, carbon dioxide, water spray

Hazards during fire-fighting:

Can form explosive mixtures at temperatures at or above the flashpoint. Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turnout gear.

Further information:

Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water.

Do not allow to enter drains or waterways.

NFPA Hazard codes:

Health: 1 Fire: 1 Reactivity: 0 Special:

6. Accidental release measures

Personal precautions:

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions.

Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

Cleanup:

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and storage

Handling

General advice:

RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS, PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition – No smoking. Keep container tightly sealed. Protect contents from the effects of light. Protect against heat. Protect from air. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used up as soon as possible. Avoid aerosol formation. Avoid dust formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. Only appropriately trained personnel may handle the substance/product. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapors. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion:

The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, and open flame. Sources of ignition should be kept well clear. Avoid extreme heat. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Storage

General advice:

Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.

Storage incompatibility:

General: Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

8. Exposure controls and personal protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with workplace control parameters

<u>COMPONENT</u>	<u>OSHA PEL</u>	<u>ACIGH TWA</u>
Thidiazuron	Not est.	Not est.
Propylene Glycol	Not est.	3 mg/m ³ (respirable)

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS.

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC2SC Chemical/Mechanical type filter system to remove a combination of particles, gas and vapors. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the users assessment of the workplace hazards.

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Wear long-sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and eyewash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

9. Physical and chemical properties

Form:	Liquid
Odor:	Slightly sweet
Color:	Beige
pH value:	5.0-6.0
Specific Gravity:	1.175

10. Stability and reactivity**Hazardous reactions:**

No hazardous reactions when stored and handled according to instructions.

Decomposition products:

No hazardous decomposition products known.

Thermal decomposition:

Stable at ambient temperature. If product is heated above decomposition temperature toxic vapors may be released. If product is heated above decomposition temperature hazardous fumes may be released.

11. Toxicological information**Acute toxicity****Oral:**

The data on toxicology refer to the active ingredient.

Information on: Thidiazuron

LD50/rat: >5,000 mg/kg

Dermal:

The data on toxicology refer to the active ingredient.

Information on: Thidiazuron

LD50/rat: >1,000 mg/kg

Skin irritation:

The data on toxicology refer to the active ingredient.

Information on: Thidiazuron

rabbit: minimal irritation

Eye irritation:

The data on toxicology refer to the active ingredient.

Information on: Thidiazuron
rabbit: mild irritation

Sensitization:

The data on toxicology refer to the active ingredient.
Information on: Thidiazuron
guinea pig: *Non-sensitizing*

Genetic toxicity:

The data on toxicology refer to the active ingredient.
Information on: Thidiazuron
Results from a number of mutagenicity studies with microorganisms, mammalian cell culture and mammals are available. Taking into account all of the information, there is weak evidence that the substance may be mutagenic in mice.

Carcinogenicity:

The data on toxicology refer to the active ingredient.
Information on: Thidiazuron
The results of animal studies gave no indication of carcinogenic effects was observed.

Reproductive toxicity:

The data on toxicology refer to the active ingredient.
Information on: Thidiazuron
The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity/teratogenicity:

The data on toxicology refer to the active ingredient.
Information on: Thidiazuron
In animal studies, the substance showed a developmental toxic effect in high doses, which were maternally toxic.

12. Ecological information

The data on toxicology refer to the active ingredient.
Information on: Thidiazuron
Acute and prolonged toxicity to fish:
Rainbow trout/LC50 (96 h): >1,000 ug/L
Bluegill/LC 50 (96 h): >1,000 ug/L

The data on toxicology refer to the active ingredient.
Information on: Thidiazuron
Other terrestrial non-mammals:
Mallard duck/LD50: 5,000 mg/kg
Honey bee/LD50: not toxic

13. Disposal considerations**Waste disposal of substance:**

Pesticide wastes are regulated.
Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law.
If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Contaminated packaging:

Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport information

In less than bulk packaging, not D.O.T. regulated.

15. Regulatory information

Federal Regulations

EPA Reg. No. 51036-430

TSCA list

Propylene Glycol 57-55-6

TSCA 12b export notification

None

SARA Title III – section 302 – notification and information

None

SARA Title III – section 313 – toxic chemical release reporting

None

US States Regulatory

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State right to know ingredients

Propylene Glycol 57-55-6

Environmental

CERCLA

None

Clean Water Section 307 Priority Pollutants

None

Safe Drinking Water Act Maximum Contaminant Levels

None

16. Other information

Refer to product label for EPA registration number.

Recommended use: crop protection product

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