

MATERIAL SAFETY DATA SHEET

Destiny® Selective Turf Herbicide

Date of Issue: August 30th, 2004

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

Product name: Destiny® Selective Turf Herbicide
Other names: None
Product code: AE F115008 00 WDG10 A103
Recommended use: For the post-emergent control of certain broadleaf and grass weeds in turf
Supplier: Bayer CropScience Pty Ltd ABN 87 000 226 022
Address: 391 - 393 Tooronga Road, East Hawthorn
Victoria 3123, Australia
Telephone: (03) 9248 6888
Facsimile: (03) 9248 6800
Website: www.bayercropscience.com.au
Contact: Technical Manager (03) 9248 6888
Emergency Telephone Number: 1800 033 111 – Orica SH&E Shared Services

2. HAZARDS IDENTIFICATION

NON-HAZARDOUS SUBSTANCE - NON-DANGEROUS GOOD

Will irritate the eyes. Not flammable.

Hazard designation: Not classified as hazardous according to criteria of Worksafe Australia
Risk phrases: None
Safety phrases: Not applicable
ADG classification: Not "dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
SUSDP classification: Schedule 5

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:	CAS Number:	Concentration (g/kg):
Iodosulfuron-methyl-sodium	[144550-36-7]	100
Other ingredients	-	900

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4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (Telephone 13 11 26), and follow the advice given. Show this Material Safety Data Sheet to a doctor.

- Inhalation:** Remove patient to fresh air. Keep rested and warm.
When dust is intensively inhaled, seek medical help immediately.
- Skin contact:** Remove contaminated clothing immediately. Wash affected areas thoroughly with soap and water.
- Eye contact:** If in eyes, hold eyes open, flood with water for at least 15 minutes and seek medical advice.
- Ingestion:** If swallowed, do not induce vomiting. Give a glass of water to drink. Never give anything by mouth to an unconscious person.
In case of problems, seek medical advice and show the package or label.
- First Aid Facilities:** Provide washing facilities in the workplace.
- Symptoms:** No symptoms are known.
- Medical attention:** Initial treatment should be symptomatic and supportive.
After ingestion, gastric lavage with activated charcoal.
Elimination by dialysis (forced alkaline diuresis).

5. FIRE FIGHTING MEASURES

- Extinguishing media:** Water spray, carbon dioxide, foam, dry chemical.
- Hazards from combustion products:** In the event of a fire, nitrogen oxides (NO_x), sulphur oxides and hydrogen iodide (HI) can be released.
- Precautions for fire fighters:** Fire fighters should wear full protective clothing and self-contained breathing apparatus (AS1716:2000). Do not release contaminated water into drains or the environment.

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Use personal protective clothing.

Use breathing apparatus if exposed to vapours/dust/aerosol.

Environmental precautions:

Do not discharge into drains/surface water/groundwater.

Methods for cleaning up/taking up:

Sweep or preferably vacuum up spillage using equipment fitted with a high efficiency final filter. Send in suitable containers for recovery or disposal at an approved local waste disposal site.

7. HANDLING AND STORAGE

Handling: Keep out of reach of children. Provide exhaust ventilation. Observe the usual precautions for handling chemicals.

Storage: Store in the closed original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. Do not store together with foodstuffs or animal feeds.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards: No exposure standards have been assigned by Worksafe Australia for the active ingredient or the excipients in the formulation.

Engineering controls: No further measures exceeding those in Section 7 are necessary.

Personal Protective Equipment: Do not inhale dust.
Wear gloves when handling product.
Observe usual precautions when handling chemicals.
Do not eat, drink or smoke during use.
Remove contaminated clothing immediately.
Wash hands, face and gloves thoroughly after handling.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Beige solid
Odour:	Odourless
Vapour pressure:	Not applicable
Vapour density:	Not applicable
Boiling point:	Not applicable
Freezing/melting point:	164.2°C
Solubility:	Water – 25g/L at 20°C Methanol – 12 g/L at 20°C Acetone - > 380 g/L at 20°C
Bulk Density:	740 to 860 g/L
pH:	Approx. 10 as 1% suspension in distilled water Approx. 10 as 10% suspension in distilled water
Flash Point:	Not flammable
Flammability (explosive) limits:	Not flammable
Auto-ignition temperature:	Not flammable
Octanol/water partition coefficient:	Not available
Formulation:	Water dispersible granule

10. STABILITY AND REACTIVITY

Chemical stability:	Not flammable. No thermal decomposition until 390°C
Hazardous polymerisation:	No hazardous reactions known.
Conditions to avoid:	None
Incompatible materials:	None
Hazardous decomposition products:	No hazardous decomposition products if stored and handled as prescribed.

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11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

Inhalation:	Product should not contain particles of inspirable size
Skin contact:	Non irritating
Eye contact:	Will irritate the eyes
Ingestion:	Product is of low toxicity via the oral route.
Other:	None

ANIMAL TOXICITY DATA – PRODUCT

Acute:

Oral toxicity:	LD ₅₀ rat: > 5000 mg/kg
Dermal toxicity:	LD ₅₀ rat: > 5000 mg/kg
Inhalation toxicity:	LC ₅₀ rat: > 1.95 mg/L (highest attainable concentration) (4 h)
Skin irritation:	Non-irritant
Eye irritation:	Moderate eye irritant
Sensitisation:	Non sensitising

Chronic:

Not available.

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12. ECOLOGICAL INFORMATION

DO NOT contaminate streams, rivers or waterways with the product or used containers.

Fish toxicity: (Iodosulfuron methyl-sodium)	LC ₅₀ : 117 mg/L (96 h) common carp (<i>Cyprinus carpio</i>)
Daphnia toxicity: (Iodosulfuron methyl-sodium)	EC ₅₀ : 12.2 to 22.9 mg/L (48 h)
Toxicity to algae: (Iodosulfuron methyl-sodium)	EC ₅₀ : 0.031 mg/L (96 h) (<i>Pseudokirchneriella subcapitata</i>)
Bird toxicity: (Iodosulfuron methyl-sodium)	Active - Oral LD ₅₀ : > 2000 mg/kg Bobwhite quail, Mallard duck, Japanese quail
Bee toxicity: (Iodosulfuron methyl-sodium)	Oral LD ₅₀ : > 289.72 µg product/bee Contact LD ₅₀ : > 481 µg product/bee
Other: (Iodosulfuron methyl-sodium)	Harmless to following non-target invertebrates: Rove beetle (<i>Aleochara bilineata</i> GYLL) Predatory mite (<i>Typhlodromus pyri</i>) Cereal aphid parasitoid (<i>Aphidius rhopalosiphi</i> (DESTEFANI-PEREZ))
Environmental fate, persistence and degradation:	Soil DT ₅₀ 1 – 5 d (7 – 10 d with low soil moisture); degradation is mainly microbial. Low leaching potential.

13. DISPOSAL CONSIDERATIONS

Follow Avcare guidelines.

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for the purpose, clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

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14. TRANSPORT INFORMATION

UN number: Not applicable

Proper shipping name: Not applicable

Class and Subsidiary Risk: Not "dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail

Packing Group: Not applicable

EPG: Not applicable

Hazchem code: Not applicable

15. REGULATORY INFORMATION

Australian Pesticides and Veterinary Medicines Authority Approval Number: 56801

16. OTHER INFORMATION

Trademark information: Destiny® is a Registered Trademark of Bayer

Preparation information: Initial edition

Data sources: Bayer CropScience Pty Ltd product safety data and published data

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

END OF MSDS