Bayer Environmental Science  
Safety Data Sheet  
Destiny® Selective Turf Herbicide  

SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: Destiny® Selective Turf Herbicide
Other names: None
Product code (UVP): 05697270
Recommended use: Herbicide
Chemical formulation: Water dispersible granules (WG)
Company: Bayer CropScience Pty. Ltd.
            ABN 87 000 226 022
            391-393 Tooronga Road, East Hawthorn
            Victoria 3123, Australia
Telephone: (03) 9248 6888
Technical Information Service: 1800 804 479
Facsimile: (03) 9248 6800
Website: www.bayeres.com.au
Contact: (03) 9248 6888 Technical Manager
Emergency telephone no.: 1800 033 111 Orica SH&E Shared Services

SECTION 2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE DANGEROUS GOODS

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>R-phrase(s)</td>
<td>R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</td>
</tr>
<tr>
<td>S-phrase(s)</td>
<td>See sections 4, 5, 6, 7, 8, 10, 13.</td>
</tr>
<tr>
<td>ADG Classification</td>
<td>Not a “Dangerous goods” for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. For transport by sea, Destiny Selective Turf Herbicide is a MARINE POLLUTANT. See Section 14.</td>
</tr>
<tr>
<td>SUSMP classification (Poison Schedule)</td>
<td>Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons)</td>
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</tbody>
</table>

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Iodosulfuron-methyl-sodium 10 % w/w

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iodosulfuron-methyl-sodium</td>
<td>144550-36-7</td>
<td>10.00</td>
</tr>
<tr>
<td>Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensate, sodium salt</td>
<td>68425-94-5</td>
<td>&lt; 15.00</td>
</tr>
<tr>
<td>Anionic tenside</td>
<td></td>
<td>&lt; 5.00</td>
</tr>
</tbody>
</table>
SECTION 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 Safety Data Sheet to the doctor.

Inhalation
Keep patient warm and at rest. Call a physician or poison control center immediately. Move to fresh air.

Skin contact
Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

Ingestion
Do NOT induce vomiting. Rinse mouth. If symptoms persist, call a physician.

Notes to physician

Symptoms
To date no symptoms are known.

Treatment
Initial treatment: Symptomatic.
In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.
Elimination by dialysis (forced alkaline diuresis).

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media
Water spray
Foam
Carbon dioxide (CO₂)
Dry powder

Extinguishing media which shall not be used for safety reasons
High volume water jet

Hazards from combustion products
In the event of fire the following may be released:
Carbon monoxide (CO)
Nitrogen oxides (NOₓ)
Sulphur oxides
Oxides of phosphorus
Hydrogen iodide (HI)

**Precautions for fire-fighting**
In the event of fire, wear self-contained breathing apparatus.
Do not allow run-off from fire fighting to enter drains or water courses.

**Hazchem Code** 2Z

### SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**
Use personal protective equipment.
Do not breathe dust.

**Environmental precautions**
Do not allow to get into surface water, drains and ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

**Methods for cleaning up**
Use mechanical handling equipment.
Keep in suitable, closed containers for disposal.

**Additional advice**
Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

### SECTION 7. HANDLING AND STORAGE

**Handling**
Hygiene measures:
When using, do not eat, drink or smoke.
Handle in accordance with good industrial hygiene and safety practice.
Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Advice on protection against fire and explosion:
Care should be taken to avoid formation of dust from abraded granules.

**Storage**
Requirements for storage areas and containers:
Store in original container.
Keep away from direct sunlight.
Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage:
Keep away from food, drink and animal feedingstuffs.

Suitable materials:
FIBC-PP (Polypropylene; approx.1000 l)
SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perlite (Inspirable dust.)</td>
<td>93763-70-3</td>
<td>10 mg/m³ (TWA)</td>
<td>12 2011</td>
<td>NOHSC</td>
</tr>
</tbody>
</table>

For further details on the Occupational Exposure Standards, see Section 16.

Personal protective equipment - End user

General advice: Follow all label instructions.

Hand protection: Rubber gloves.

Eye protection: Goggles.

Engineering controls

Advice on safe handling:
- Provide for appropriate exhaust ventilation and dust collection at machinery.
- Avoid dust formation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form: Water-dispersible granules
Colour: Beige
Odour: Weak, characteristic

Safety data
pH: 9.5 - 10.5 at 1 % (23 °C)
Flash point: No data available
Ignition temperature: No data available
Autoignition temperature: 378 °C
Minimum Ignition Energy: > 100 mJ
Upper explosion limit: No data available
Lower explosion limit: No data available
Vapour pressure: No data available
Relative vapour density: No data available
Density: No data available
Bulk density: 718 - 842 kg/m³
Water solubility: Dispersible
Partition coefficient: n-octanol/water: No data available
Combustion number: CN1 Does not catch fire.
Oxidizing properties: No oxidizing properties
Explosivity: Not explosive
Dust content: Nearly dust-free

SECTION 10. STABILITY AND REACTIVITY

Chemical stability: Stable under recommended storage conditions.
Thermal decomposition: > 390 °C, Heating rate: 10 K/min, Decomposition energy: 41.1 J/g
Hazardous reactions: No hazardous reactions known.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential health effects
Inhalation: Harmful if inhaled. Avoid breathing dust.
Skin: Avoid contact with skin and clothing.
Eye: Moderate eye irritation. May cause redness, tearing. Do not get in eyes.
Ingestion: Do not take internally.

Animal toxicity studies
Acute oral toxicity: LD_{50} (rat) > 5,000 mg/kg
Acute inhalation toxicity: LC_{50} (rat) > 1.951 mg/l Exposure time: 4 h Highest attainable concentration.
Acute dermal toxicity: LD_{50} (rat) > 5,000 mg/kg
Skin irritation: No skin irritation (rabbit).
Eye irritation: Slight irritant effect - does not require labelling (rabbit).
Sensitisation: Non-sensitizing (guinea pig). OECD Test Guideline 406, Buehler test

Further information
The toxicological data refer to a similar formulation.
SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects
Toxicity to fish: \( LC_{50} \) (Carp (Cyprinus carpio)) 117 mg/l
Exposure time: 96 h

Toxicity to aquatic invertebrates: \( EC_{50} \) (Water flea (Daphnia magna)) 16.4 mg/l
Exposure time: 48 h

Toxicity to aquatic plants: \( EC_{50} \) (Pseudokirchneriella subcapitata) 0.192 mg/l
Exposure time: 72 h

Additional ecological information
The ecological data refer to a similar formulation.

SECTION 13. DISPOSAL CONSIDERATIONS

Plastic and foil bags
Single rinse before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Puncture and bury empty bags 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 this purpose clear of waterways, desirable vegetation and tree roots. Empty bags and product should not be burnt.

SECTION 14. TRANSPORT INFORMATION

ADG
UN number: 3077
Class: 9
Subsidiary Risk: None
Packaging group: III
Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IODOSULFURON-METHYL-SODIUM)
Hazchem Code: 2Z

According to AU01, Environmentally Hazardous Substances in packagings, IBC or any other receptacle not exceeding 500 kg or 500 L are not subject to the ADG Code.

IMDG
UN number: 3077
Class: 9
Subsidiary Risk: None
Packaging group: III
EmS: F-A , S-F
Marine pollutant: YES
Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IODOSULFURON-METHYL-SODIUM)

IATA
UN number: 3077
Class: 9
Subsidiary Risk: None
Packaging group: III
Environment. Hazardous Mark: YES
Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IODOSULFURON-METHYL-SODIUM)

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994.
Australian Pesticides and Veterinary Medicines Authority approval number: 56801.
See also Section 2.

SECTION 16. OTHER INFORMATION

Trademark information
Destiny® is registered trademark of the Bayer Group.

This SDS 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 SDS 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.

Further details on the Occupational Exposure Standards mentioned in Section 8:
CEILING: Ceiling Limit Value
OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"
PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.
STEL: Exposure standard - short term exposure limit (STEL): A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.
SKIN DES: Skin notation: Absorption through the skin may be a significant source of exposure.
TWA: Exposure standard - time-weighted average (TWA): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.
Reason for revision: Changed name from Material Safety Data Sheet to Safety Data Sheet.

END OF SDS