SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Trade name Destiny® Selective Turf Herbicide
Product code (UVP) 05697270

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

Use Herbicide

1.3 Details of the supplier of the safety data sheet

Supplier Bayer Cropscience Pty Ltd
ABN 87 000 226 022
Level 1, 8 Redfern Road
3123 Hawthorn East
Victoria
Australia

Telephone (03) 9248 6888
Telefax (03) 9248 6800

Responsible Department 1800 804 479 Technical Information Service
Website www.environmentalscience.bayer.com.au

1.4 Emergency telephone no.

Emergency telephone no. 1800 033 111 IXOM Operations Pty Ltd

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Australian GHS Regulation

Acute aquatic toxicity: Category 1
H400 Very toxic to aquatic life.

Chronic aquatic toxicity: Category 1
H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to specific Australian legislation

No hazard label for supply/use required.

2.3 Other hazards

No other hazards known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

contains: Iodosulfuron-methyl-sodium 10 % w/w
Chemical nature Water dispersible granules (WG)
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.

4.1 Description of first aid measures

**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.

4.2 Most important symptoms and effects, both acute and delayed

**Symptoms**
No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

**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).

5.1 Extinguishing media

**Suitable**
Water spray, Foam, Carbon dioxide (CO2), Dry powder

**Unsuitable**
High volume water jet
5.2 Special hazards arising from the substance or mixture
In the event of fire the following may be released: Carbon monoxide (CO), Nitrogen oxides (NOx), Sulphur oxides, Oxides of phosphorus, Hydrogen iodide (HI)

5.3 Advice for firefighters
In the event of fire, wear self-contained breathing apparatus.

Special protective equipment for firefighters
Do not allow run-off from fire fighting to enter drains or water courses. Avoid contact with spilled product or contaminated surfaces. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Do not allow run-off from fire fighting to enter drains or water courses. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth.

Further information
Do not allow run-off from fire fighting to enter drains or water courses. Avoid contact with spilled product or contaminated surfaces. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Do not allow run-off from fire fighting to enter drains or water courses. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth.

Hazchem Code
2Z

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Precautions
Use personal protective equipment. Do not breathe dust.

6.2 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.

6.3 Methods and materials for containment and cleaning up
Methods for cleaning up
Use mechanical handling equipment. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
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

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

Advice on protection against fire and explosion
Avoid dust formation by friction.

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.

7.2 Conditions for safe storage, including any incompatibilities
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.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 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>Iodosulfuron-methyl-sodium</td>
<td>144550-36-7</td>
<td>1 mg/m³ (TWA)</td>
<td></td>
<td>OES BCS*</td>
</tr>
<tr>
<td>Perlit (Inhalable dust.)</td>
<td>93763-70-3</td>
<td>10 mg/m³ (TWA)</td>
<td>12 2011</td>
<td>AU NOEL</td>
</tr>
</tbody>
</table>

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

8.2 Exposure controls

Respiratory protection
Wear respirator with a particle filter mask (protection factor 4) conforming to European norm EN149FFP1 or equivalent. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

Hand protection
Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness of 0,4 mm). Wash when contaminated and dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

Eye protection
Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

Skin and body protection
Wear standard coveralls and Category 3 Type 5 suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

General protective measures
Avoid contact with skin and eyes.
Do not breathe dust.
In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the above mentioned recommendations would apply.

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

9.1 Information on basic physical and chemical properties
### Section 10. Stability and Reactivity

#### 10.1 Reactivity
- **Thermal decomposition**: > 390 °C, Heating rate: 10 K/min, Decomposition energy: 41.1 J/g

#### 10.2 Chemical stability
- Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions
- No hazardous reactions known. Stable under recommended storage conditions.

#### 10.4 Conditions to avoid
- Extremes of temperature and direct sunlight.

#### 10.5 Incompatible materials
- Store only in the original container.

#### 10.6 Hazardous decomposition products
- No decomposition products expected under normal conditions of use.

### Section 11. Toxicological Information

#### 11.1 Information on toxicological effects
- **Acute oral toxicity**: LD50 (Rat) > 5,000 mg/kg
- **Acute inhalation toxicity**: LC50 (Rat) > 1.951 mg/l
  - Exposure time: 4 h
  - Highest attainable concentration.
- **Acute dermal toxicity**: LD50 (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

Assessment mutagenicity:
Iodosulfuron-methyl-sodium was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity:
Iodosulfuron-methyl-sodium was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction:
Iodosulfuron-methyl-sodium did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity:
Iodosulfuron-methyl-sodium did not cause developmental toxicity in rats and rabbits.

Assessment STOT Specific target organ toxicity – repeated exposure:
Iodosulfuron-methyl-sodium did not cause specific target organ toxicity in experimental animal studies.

Aspiration hazard:
Based on available data, the classification criteria are not met.

Information on likely routes of exposure:
Caution!
Harmful if inhaled., Avoid breathing dust., Moderate eye irritation., Avoid contact with skin, eyes and clothing.
Do not take internally.
This product may cause adverse effects on non-target plants.

Early onset symptoms related to exposure:
Refer to Section 4

Delayed health effects from exposure:
Refer to Section 11

Exposure levels and health effects:
Refer to Section 4

Interactive effects:
Not known

When specific chemical data is not available:
Not applicable

Mixture of chemicals:
Refer to Section 2.1

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

12.1 Toxicity
Toxicity to fish LC50 (Cyprinus carpio (Carp)) 117 mg/l
Exposure time: 96 h
Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) 16.4 mg/l
Exposure time: 48 h
Toxicity to aquatic plants EC50 (Raphidocelis subcapitata (freshwater green alga)) 0.192 mg/l
Exposure time: 72 h

12.2 Persistence and degradability
Biodegradability Iodosulfuron-methyl-sodium:
Not rapidly biodegradable
Koc Iodosulfuron-methyl-sodium: Koc: 45

12.3 Bioaccumulative potential
Bioaccumulation Iodosulfuron-methyl-sodium:
Does not bioaccumulate.

12.4 Mobility in soil
Mobility in soil Iodosulfuron-methyl-sodium: Mobile in soils

12.5 Other adverse effects
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
Transport hazard class(es) 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**

<table>
<thead>
<tr>
<th>UN number</th>
<th>3077</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport hazard class(es)</td>
<td>9</td>
</tr>
<tr>
<td>Subsidiary Risk</td>
<td>None</td>
</tr>
<tr>
<td>Packaging group</td>
<td>III</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>YES</td>
</tr>
<tr>
<td>Description of the goods</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IODOSULFURON-METHYL-SODIUM)</td>
</tr>
</tbody>
</table>

**IATA**

<table>
<thead>
<tr>
<th>UN number</th>
<th>3077</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport hazard class(es)</td>
<td>9</td>
</tr>
<tr>
<td>Subsidiary Risk</td>
<td>None</td>
</tr>
<tr>
<td>Packaging group</td>
<td>III</td>
</tr>
<tr>
<td>Environm. Hazardous Mark</td>
<td>YES</td>
</tr>
<tr>
<td>Description of the goods</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (IODOSULFURON-METHYL-SODIUM)</td>
</tr>
</tbody>
</table>

**SECTION 15. REGULATORY INFORMATION**

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994
Australian Pesticides and Veterinary Medicines Authority approval number: 56801

**SUSMP classification (Poison Schedule)**

Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons)

**SECTION 16. OTHER INFORMATION**

**Trademark information**

Destiny® is a 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.

**Abbreviations and acronyms**

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR European Agreement concerning the International Carriage of Dangerous Goods by
Changes since the last version are highlighted in the margin. This version replaces all previous versions.