SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name Soccer® 750 WG Herbicide
Other names none
Product code (UVP) 04399641
Chemical Group triazinone
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.bayercropscience.com.au
Emergency telephone no. 1800 033 111 Orica SH&E Shared Services

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

HAZARDOUS SUBSTANCE DANGEROUS GOODS

Hazardous classification Hazardous (National Occupational Health and Safety Commission - NOHSC)
R-phrase(s) R20/22 - Harmful by inhalation and if swallowed.
R49 - May cause cancer by inhalation.
S-phrase(s) See sections 4, 5, 6, 7, 8, 10, 12, 13.
ADG Classification "Dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. - See Section 14.
SUSMP classification (Poison Schedule) Schedule 6 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature Metribuzin 750 g/l

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metribuzin</td>
<td>21087-64-9</td>
<td>75.00</td>
</tr>
<tr>
<td>Kaolin</td>
<td>1332-58-7</td>
<td>10.00</td>
</tr>
<tr>
<td>Quartz (Silica, Crystalline)</td>
<td>14808-60-7</td>
<td>&lt;= 5.00</td>
</tr>
</tbody>
</table>

Other ingredients (non-hazardous) to 100%

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.

General advice
When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

Inhalation
Move to fresh air. In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice. Call a physician or poison control center immediately.

Skin contact
Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with 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
Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Notes to physician
Symptoms
Breathing difficulties, Sedation

Treatment
Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.
There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media
Water
Dry chemical

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)
Carbon dioxide (CO2)
Nitrogen oxides (NOx)
Sulphur oxides
Mercaptans
Hydrogen cyanide (hydrocyanic acid)
Amines

Precautions for fire-fighting
In the event of fire, wear self-contained breathing apparatus.
In the event of fire and/or explosion do not breathe fumes.
Keep out of smoke.
Fight fire from upwind position.
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.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

### Personal precautions
- Avoid contact with spilled product or contaminated surfaces.
- When dealing with a spillage do not eat, drink or smoke.
- Avoid dust formation.
- Remove all sources of ignition.
- Use personal protective equipment.
- Keep unauthorized people away.

### Environmental precautions
- Apply this product as specified on the label.
- Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.
- If the product contaminates rivers and lakes or drains inform respective authorities.

### Methods for cleaning up
- Sweep up or vacuum up spillage and collect in suitable container for disposal.
- Clean contaminated floors and objects thoroughly, observing environmental regulations.
- Contaminated soil may have to be removed and disposed.

### 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**

### Handling

#### Hygiene measures
- 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
- Keep away from heat and sources of ignition.
- Care should be taken to avoid formation of dust from abraded granules.
- Dust may form explosive mixture in air.

### Storage

#### Requirements for storage areas and containers
- Keep out of the reach of children.
- Keep containers tightly closed in a dry, cool and well-ventilated place.
- Keep away from direct sunlight.

**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>
</table>

3/9
For further details on the Occupational Exposure Standards, see Section 16.

Personal protective equipment - End user

Respiratory protection AS/NZS 1715/1716 approved respirator
Hand protection Elbow-length PVC or nitrile gloves
Eye protection Goggles
Skin and body protection Cotton overall buttoned to the neck and wrist
Washable hat

Engineering Controls
Advice on safe handling
Handle and open container in a manner as to prevent spillage.
Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Metribuzin</th>
<th>21087-64-9</th>
<th>0.56 mg/m3 (TWA)</th>
<th>OES BCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metribuzin</td>
<td>21087-64-9</td>
<td>5 mg/m3 (TWA)</td>
<td>08 2005 AU OEL</td>
</tr>
<tr>
<td>Kaolin (Inspirable dust.)</td>
<td>1332-58-7</td>
<td>10 mg/m3 (TWA)</td>
<td>08 2005 AU OEL</td>
</tr>
<tr>
<td>Quartz (Silica, Crystalline)</td>
<td>14808-60-7</td>
<td>0.1 mg/m3 (TWA)</td>
<td>08 2005 AU OEL</td>
</tr>
</tbody>
</table>

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

Personal protective equipment - End user

Respiratory protection AS/NZS 1715/1716 approved respirator
Hand protection Elbow-length PVC or nitrile gloves
Eye protection Goggles
Skin and body protection Cotton overall buttoned to the neck and wrist
Washable hat

Engineering Controls
Advice on safe handling
Handle and open container in a manner as to prevent spillage.
Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
</tr>
<tr>
<td>Colour</td>
</tr>
<tr>
<td>Odour</td>
</tr>
<tr>
<td>Safety data</td>
</tr>
<tr>
<td>pH</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Flash point</td>
</tr>
<tr>
<td>Ignition temperature</td>
</tr>
<tr>
<td>Minimum Ignition Energy</td>
</tr>
<tr>
<td>Upper explosion limit</td>
</tr>
<tr>
<td>Lower explosion limit</td>
</tr>
</tbody>
</table>
Vapour pressure 0.058 mPa at 20 °C
The value mentioned relates to the active ingredient.

Relative vapour density no data available

Density no data available

Bulk density 33 - 37 lb/ft³ (loose)

Water solubility dispersible

Partition coefficient: n-octanol/water no data available

Viscosity, dynamic not applicable

Explosivity Dust may form explosive mixture in air.

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability Stable under recommended storage conditions.

Conditions to avoid Sustained temperatures above 37.8 °C (100 °F).

Materials to avoid Strong bases
Ketones
Aldehydes

Hazardous Decomposition Products Thermal decomposition can lead to release of:
Carbon oxides
Nitrogen oxides (NOx)
Sulphur oxides
Mercaptans
Hydrogen cyanide (hydrocyanic acid)
Amines

Thermal decomposition no data available

Hazardous reactions Hydrolyses in alkaline medium.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Inhalation Harmful if inhaled.

Skin May cause skin irritation.

Eye Causes eye irritation.

Ingestion Harmful if swallowed.
Chronic exposure

This product is not listed as a carcinogen by ACGIH, NTP, IARC or OSHA. However, it may contain crystalline silica (quartz), a substance which has been listed as a carcinogen by ACGIH, NTP and IARC. Crystalline silica is a naturally-occurring mineral component of many sands and clays. Although the carcinogenic potential of crystalline silica in humans is controversial, it must be considered if it is inhaled under excessive exposure conditions. The respirable portion of the silica that may be contained in this product, however, is small, such that inhalation exposure during anticipated conditions of use is minimal.

Acute oral toxicity

LD50 (rat) 1,449 mg/kg

Acute inhalation toxicity

LC50 (rat) > 4.84 mg/l
Exposure time: 4 h
Determined in the form of dust.

Acute dermal toxicity

LD50 (rat) > 2,000 mg/kg

Skin irritation

Mild skin irritation. (rabbit)

Eye irritation

Moderate eye irritation. (rabbit)

Sensitisation

Non-sensitizing. (guinea pig)

Chronic toxicity

Metribuzin caused specific target organ toxicity in experimental animal studies in dogs in the following organ(s): blood. Metribuzin caused haemolytic anaemia in animal studies. The observed effects do not appear to be relevant for humans.

Assessment Mutagenicity

Metribuzin was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity

Metribuzin was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Metribuzin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Metribuzin is related to parental toxicity.

Assessment developmental toxicity

Metribuzin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Metribuzin are related to maternal toxicity.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish

LC50 (Leuciscus idus (Golden orfe)) 141.6 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient metribuzin.
Toxicity to fish

LC50 (Oncorhynchus mykiss (rainbow trout)) 74.6 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient metribuzin.

Toxicity to aquatic invertebrates

LC50 (Water flea (Daphnia magna)) 49.6 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient metribuzin.

Toxicity to aquatic plants

EC50 (Scenedesmus quadricauda (Green algae)) 0.021 mg/l
The value mentioned relates to the active ingredient metribuzin.

Toxicity to bacteria

(Activated sludge) 761 mg/l
The value mentioned relates to the active ingredient metribuzin.

Toxicity to other organisms

LC50 (Colinus virginianus (Bobwhite quail)) 164 mg/kg
The value mentioned relates to the active ingredient metribuzin.

Toxicity to other organisms

LD50 (Anas platyrhynchos (Mallard duck)) 460 - 680 mg/kg
The value mentioned relates to the active ingredient metribuzin.

Stability in water

DT50: 7 d.
Pond water
The value mentioned relates to the active ingredient metribuzin.

Stability in soil

DT50 30 - 60 d. The value mentioned relates to the active ingredient metribuzin.

Bioaccumulation

no data available

Additional Environmental Information

no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Metal drums and plastic containers:
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 this purpose clear of waterways, desirable vegetation and tree roots. Empty containers 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. (METRIBUZIN MIXTURE)
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. (METRIBUZIN MIXTURE)

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

**SECTION 15. REGULATORY INFORMATION**
Registered according to the Agricultural and Veterinary Chemicals Code Act 1994
Australian Pesticides and Veterinary Medicines Authority approval number: 63020
See also Section 2.

**SECTION 16. OTHER INFORMATION**
Trademark information
Soccer® 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.
Further details on the Occupational Exposure Standards mentioned in Section 8:
CEILING: Ceiling Limit Value
OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"
Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the
Occupational Environment)
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.

END OF SDS