SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier
Trade name Flint® 500 WG Fungicide
Product code (UVP) 05584493

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

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.crop.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
Skin sensitisation: Category 1
H317 May cause an allergic skin reaction.
Effects on or via lactation
H362 May cause harm to breast-fed children.
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
Hazard label for supply/use required.

Hazardous components which must be listed on the label:
Trifloxystrobin
Safety Data Sheet

Flint® 500 WG Fungicide

Signal word: Warning

Hazard statements

H317 May cause an allergic skin reaction.
H362 May cause harm to breast-fed children.

Precautionary statements

P260 Do not breathe dust.
P263 Avoid contact during pregnancy/ while nursing.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing.
P302 + P352 IF ON SKIN: Wash with plenty of water/ soap.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
P501 Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

No other hazards known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Trifloxystrobin 50%
Water dispersible granules (WG)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trifloxystrobin</td>
<td>141517-21-7</td>
<td>50.00</td>
</tr>
<tr>
<td>Diatomaceous earth</td>
<td>61790-53-2</td>
<td>&gt;= 5.00 - &lt;= 15.00</td>
</tr>
<tr>
<td>Other ingredients (non-hazardous) to 100%</td>
<td></td>
<td></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.

4.1 Description of first aid measures

General advice

Move out of dangerous area. Remove contaminated clothing immediately and dispose of safely. Place and transport victim in stable position (lying sideways).

Inhalation

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

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  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. There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable  Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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: Hydrogen cyanide (hydrocyanic acid), Hydrogen fluoride, Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)

5.3 Advice for firefighters

Special protective equipment for firefighters  In the event of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus and protective suit.

Further information  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. Do not allow run-off from fire fighting to enter drains or water courses.

Hazchem Code  2Z

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions  Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke. Keep unauthorized people away. Use personal protective equipment. Avoid dust formation.

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: Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations. Collect and transfer the product into a properly labelled and tightly closed container.

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: Use only in area provided with appropriate exhaust ventilation.
Advice on protection against fire and explosion: Avoid dust formation by friction. Keep away from heat and sources of ignition.
Hygiene measures: Avoid contact with skin, eyes and clothing. Keep working clothes separately. After each day's use, wash gloves, face shield or goggles and contaminated clothing. Wash hands immediately after work, if necessary take a shower. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Store in a place accessible by authorized persons only. Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight.
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>Trifloxystrobin</td>
<td>141517-21-7</td>
<td>2.7 mg/m³ (SK-SEN)</td>
<td></td>
<td>OES BCS*</td>
</tr>
<tr>
<td>Diatomaceous earth (Inhalable dust.)</td>
<td>61790-53-2</td>
<td>10 mg/m³ (TWA)</td>
<td>04 2013</td>
<td>AU NOEL</td>
</tr>
</tbody>
</table>

*OES BCS: Internal Bayer AG, Crop Science Division "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
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Wash gloves when contaminated. 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.

Material
Nitrile rubber
Rate of permeability
> 480 min
Glove thickness
> 0.4 mm
Protective index
Class 6
Directive
Protective gloves complying with EN 374.

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

Skin and body protection
Wear standard coveralls and Category 3 Type 4 suit.
If there is a risk of significant exposure, consider a higher protective type 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
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
Use only in area provided with appropriate exhaust ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
Form
water-dispersible granules
Colour
light brown
Odour
weak, characteristic
Odour Threshold
No data available
pH
8.5 - 10.5 (1 %) (23 °C) (deionized water)
Melting point/range
No data available
Boiling Point
No data available
Flash point
No data available
Flammability
does not ignite
Auto-ignition temperature
No data available
Self-accelerating decomposition temperature (SADT)  No data available
Upper explosion limit  No data available
Lower explosion limit  No data available
Vapour pressure  No data available
Evaporation rate  No data available
Relative vapour density  No data available
Relative density  No data available
Density  No data available
Bulk density 0.60 kg/m3
Water solubility dispersible
Partition coefficient: n-octanol/water Trifloxystrobin: log Pow: 4.5 (25 °C)
Viscosity, kinematic  No data available
Impact sensitivity Not impact sensitive.
Oxidizing properties No oxidizing properties
Explosivity Not explosive
9.2 Other information Further safety related physical-chemical data are not known.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity
Thermal decomposition Stable under normal conditions.
Self heating Not self-heating
10.2 Chemical stability Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions No hazardous reactions when stored and handled according to prescribed instructions.
10.4 Conditions to avoid Extremes of temperature and direct sunlight.
10.5 Incompatible materials Strong acids, strong bases
10.6 Hazardous decomposition products Thermal decomposition can lead to release of:
Hydrogen cyanide (hydrocyanic acid)
Hydrogen fluoride
Carbon monoxide
Nitrogen oxides (NOx)
SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

**Acute oral toxicity**
LD50 (Rat) > 2,000 mg/kg
Test conducted with a similar formulation.

**Acute inhalation toxicity**
During intended and foreseen applications, no respirable aerosol is formed.

**Acute dermal toxicity**
LD50 (Rat) > 2,000 mg/kg
Test conducted with a similar formulation.

**Skin corrosion/irritation**
Slight irritant effect - does not require labelling. (Rabbit)
Test conducted with a similar formulation.

**Serious eye damage/eye irritation**
Slight irritant effect - does not require labelling. (Rabbit)
Test conducted with a similar formulation.

**Respiratory or skin sensitisation**
Skin: Sensitising (Guinea pig)
OECD Test Guideline 406, Magnusson & Kligman test
Test conducted with a similar formulation.
Skin: Non-sensitizing. (Guinea pig)
OECD Test Guideline 406, Buehler test
Test conducted with a similar formulation.

**Assessment mutagenicity**
Trifloxystrobin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**Assessment carcinogenicity**
Trifloxystrobin was not carcinogenic in lifetime feeding studies in rats and mice.

**Assessment toxicity to reproduction**
Trifloxystrobin caused reduced body weight development in offspring during lactation only at doses also producing systemic toxicity in adult rats.

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

**Assessment STOT Specific target organ toxicity – single exposure**
Trifloxystrobin: Based on available data, the classification criteria are not met.

**Assessment STOT Specific target organ toxicity – repeated exposure**
Trifloxystrobin 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**
Harmful if inhaled.
Causes skin irritation. May cause sensitisation by skin contact.
May cause eye irritation.
Harmful if swallowed.
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
No further toxicological information is available.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish
LC50 (Oncorhynchus mykiss (rainbow trout)) 0.036 mg/l
Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)) 0.054 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient trifloxystrobin.

Toxicity to aquatic invertebrates
EC50 (Daphnia magna (Water flea)) 0.01 mg/l
Exposure time: 48 h

LC50 (Mysidopsis bahia (mysid shrimp)) 0.00862 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient trifloxystrobin.

Toxicity to aquatic plants
EC50 (Raphidocelis subcapitata (freshwater green alga)) 0.15 mg/l
Growth rate; Exposure time: 72 h

EC10 (Desmodesmus subspicatus (green algae)) 0.0025 mg/l
Growth rate; Exposure time: 72 h
The value mentioned relates to the active ingredient trifloxystrobin.

EC50 (Desmodesmus subspicatus (green algae)) 0.0053 mg/l
Exposure time: 72 h
The value mentioned relates to the active ingredient trifloxystrobin.

Toxicity to other organisms
LD50 (Colinus virginianus (Bobwhite quail)) > 2,000 mg/kg
The value mentioned relates to the active ingredient trifloxystrobin.

LD50 (Eisenia fetida (earthworms)) > 1,000 mg/kg
The value mentioned relates to the active ingredient trifloxystrobin.

LD50 (Apis mellifera (bees)) > 0.2 mg/kg
The value mentioned relates to the active ingredient trifloxystrobin.
12.2 Persistence and degradability

Biodegradability

Trifloxystrobin: Not rapidly biodegradable

Koc

Trifloxystrobin: Koc: 2377

12.3 Bioaccumulative potential

Bioaccumulation

Trifloxystrobin: Bioconcentration factor (BCF) 431
Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil

Trifloxystrobin: Slightly mobile in soils

12.5 Other adverse effects

Additional ecological information

No other effects to be mentioned.

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. Triple-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 deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not burn empty containers or product. Do not reuse container for any other purpose.

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. (TRIFLOXYSTROBIN)

Hazchem Code 2Z

AU01: Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;
a) packagings that do not incorporate a receptacle exceeding 500 kg(L); or
b) IBCs

IMDG

UN number 3077
Transport hazard class(es) 9
Subsidiary Risk None
Packaging group III
Marine pollutant YES
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRIFLOXYSTROBIN)

IATA
UN number 3077
Transport hazard class(es) 9
Subsidiary Risk None
Packaging group III
Environm. Hazardous Mark YES
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRIFLOXYSTROBIN)

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994
Australian Pesticides and Veterinary Medicines Authority approval number: 53871

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

SECTION 16. OTHER INFORMATION

Trademark information Flint® is a Registered Trademark of the Bayer Group.

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 Road
ATE Acute toxicity estimate
AU OEL Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)
CAS-Nr. Chemical Abstracts Service number
CEILING Ceiling Limit Value
Conc. Concentration
EC-No. European community number
ECx Effective concentration to x %
EINECS European inventory of existing commercial substances
ELINCS European list of notified chemical substances
EN European Standard
EU European Union
IATA International Air Transport Association
IBC International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
IC\textsubscript{x} \quad \text{Inhibition concentration to x \%}

IMDG \quad \text{International Maritime Dangerous Goods}

LC\textsubscript{x} \quad \text{Lethal concentration to x \%}

LD\textsubscript{x} \quad \text{Lethal dose to x \%}

LOEC/LOEL \quad \text{Lowest observed effect concentration/level}

MARPOL \quad \text{MARPOL: International Convention for the prevention of marine pollution from ships}

N.O.S. \quad \text{Not otherwise specified}

NOEC/NOEL \quad \text{No observed effect concentration/level}

OECD \quad \text{Organization for Economic Co-operation and Development}

OES BCS \quad \text{OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"}

PEAK \quad \text{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.}

RID \quad \text{Regulations concerning the International Carriage of Dangerous Goods by Rail}

SK-SEN \quad \text{Skin sensitiser}

SKIN\textsubscript{DES} \quad \text{SKIN\textsubscript{DES}: Skin notation: Absorption through the skin may be a significant source of exposure.}

STEL \quad \text{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.}

TWA \quad \text{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.}

UN \quad \text{United Nations}

WHO \quad \text{World health organisation}

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.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.