SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier
Trade name: Raxil® T Flowable Seed Dressing
Product code (UVP): 05560918

1.2 Relevant identified uses of the substance or mixture and uses advised against
Use: Fungicide, Seed treatment

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
Chronic aquatic toxicity: Category 2
H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements
No hazard label for supply/use required.

2.3 Other hazards
No other hazards known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature
Tebuconazole:Triflumuron 25:4g/l
Chemical nature: Flowable concentrate for seed treatment (FS)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tebuconazole</td>
<td>107534-96-3</td>
<td>2.36</td>
</tr>
</tbody>
</table>
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 Move the victim to fresh air and keep at rest. If symptoms persist, call a physician.

Skin contact Take off contaminated clothing and shoes immediately. 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. If eye irritation or redness persists, see an ophthalmologist.

Ingestion Rinse mouth. Do NOT induce vomiting. If symptoms persist, call a physician. Do not induce vomiting or give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms To date no symptoms are known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment Systemic treatment: Treat symptomatically. There is no specific antidote. Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable Water spray, Foam, Dry chemical, Carbon dioxide (CO2), Sand
5.2 Special hazards arising from the substance or mixture

In the event of fire the following may be released: Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid), Hydrogen fluoride, Carbon monoxide (CO), Nitrogen oxides (NOx)

5.3 Advice for firefighters

Special protective equipment for firefighters

Wear self-contained breathing apparatus and protective suit.

Further information

Evacuate personnel to safe areas. Whenever possible, contain firefighting water by diking area with sand or earth. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Do not allow run-off from firefighting to enter drains or water courses.

Hazchem Code

\[5\]

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. Use personal protective equipment. Keep unauthorized people away.

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

Collect and transfer the product into a properly labelled and tightly closed container. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations.

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

Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

Advice on protection against fire and explosion

No special precautions required.

Hygiene measures

Contact with eyes and skin must be avoided. Wash thoroughly with soap and water after handling.

7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage areas and containers
Store in original container. Keep out of reach of children and animals. Keep away from direct sunlight. Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed.

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>Tebuconazole</td>
<td>107534-96-3</td>
<td>0.2 mg/m³</td>
<td></td>
<td>OES BCS*</td>
</tr>
<tr>
<td>Triflumuron</td>
<td>64628-44-0</td>
<td>0.2 mg/m³</td>
<td></td>
<td>OES BCS*</td>
</tr>
<tr>
<td>Glycerine (Inhalable mist.)</td>
<td>56-81-5</td>
<td>10 mg/m³</td>
<td>12 2011</td>
<td>AU NOEL</td>
</tr>
<tr>
<td>Synthetic amorphous silica (Inhalable dust.)</td>
<td>112926-00-8</td>
<td>10 mg/m³</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
In case of insufficient ventilation wear suitable respiratory equipment. Dust mask

Hand protection
PVC or nitrile rubber gloves

Eye protection
Goggles

Skin and body protection
Long-sleeved shirt and long pants
Chemical resistant headgear for overhead exposure

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form          suspension
Colour        red
Odour         weak, characteristic
pH            6.0 - 8.0 at (23 °C)
Flash point   > 100 °C
Density       ca. 1.07 g/cm³ at 20 °C
Partition coefficient: n-octanol/water

Tebuconazole: $\log P_{ow}$: 3.7

Triflumuron: $\log P_{ow}$: 4.9 at 22 °C

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.

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
Elevated temperatures

10.5 Incompatible materials
Oxidizing agents

10.6 Hazardous decomposition products
Thermal decomposition can lead to release of:
- Hydrogen chloride (HCl)
- Hydrogen cyanide (hydrocyanic acid)
- Hydrogen fluoride
- Carbon monoxide
- Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity
LD$_{50}$ (Rat) 1,700 mg/kg
The value mentioned relates to the active ingredient tebuconazole.
LD$_{50}$ (Rat) > 5,000 mg/kg
The value mentioned relates to the active ingredient triflumuron.

Acute inhalation toxicity
LC$_{50}$ (Rat) > 5.1 mg/l
Exposure time: 4 h
Determined in the form of dust.
The value mentioned relates to the active ingredient tebuconazole.
LC$_{50}$ (Rat) > 1.6 mg/l
Exposure time: 4 h
Determined in the form of dust.
Highest attainable concentration.
The value mentioned relates to the active ingredient triflumuron.

Acute dermal toxicity
LD$_{50}$ (Rat) > 5,000 mg/kg
The value mentioned relates to the active ingredient tebuconazole.
LD$_{50}$ (Rat) > 5,000 mg/kg
The value mentioned relates to the active ingredient triflumuron.

Skin irritation
No skin irritation (Rabbit)
The information is derived from the properties of the individual components.

**Eye irritation**
Mild eye irritation (Rabbit)
The value mentioned relates to the active ingredient tebuconazole.

**Sensitisation**
Non-sensitizing (Guinea pig)
The information is derived from the properties of the individual components.

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

**Assessment carcinogenicity**
Tebuconazole caused at high dose levels an increased incidence of tumours in mice in the following organ(s): Liver. The mechanism of tumour formation is not considered to be relevant to man.
Triflumuron was not carcinogenic in lifetime feeding studies in rats and mice.

**Assessment toxicity to reproduction**
Tebuconazole 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 Tebuconazole is related to parental toxicity.
Triflumuron did not cause reproductive toxicity in a two-generation study in rats.

**Assessment developmental toxicity**
Tebuconazole caused developmental toxicity only at dose levels toxic to the dams. Tebuconazole caused an increased incidence of post implantation losses, an increased incidence of non-specific malformations.
Triflumuron did not cause developmental toxicity in rats and rabbits.

**Assessment STOT Specific target organ toxicity – repeated exposure**
Tebuconazole did not cause specific target organ toxicity in experimental animal studies.
Triflumuron 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**
May be harmful if inhaled.
May cause skin irritation.
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 (Lepomis macrochirus (Bluegill sunfish)) 5.7 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient tebuconazole.

LC50 (Oncorhynchus mykiss (rainbow trout)) 4.4 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient tebuconazole.

LC50 (Oncorhynchus mykiss (rainbow trout)) > 320 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient triflumuron.

Toxicity to aquatic invertebrates
EC50 (Daphnia magna (Water flea)) 4.2 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient tebuconazole.

EC50 (Daphnia magna (Water flea)) 0.225 mg/l
Exposure time: 49 h
The value mentioned relates to the active ingredient triflumuron.

Toxicity to aquatic plants
EC50 (Raphidocelis subcapitata (freshwater green alga)) 3.8 mg/l
Exposure time: 72 h
The value mentioned relates to the active ingredient tebuconazole.

EC50 (Desmodesmus subspicatus (green algae)) > 25 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient triflumuron.

Toxicity to other organisms
LD50 (Colinus virginianus (Bobwhite quail)) 1,988 mg/kg
The value mentioned relates to the active ingredient tebuconazole.

LD50 (Coturnix japonica (Japanese quail)) 2,912 mg/kg
The value mentioned relates to the active ingredient tebuconazole.

LD50 (Colinus virginianus (Bobwhite quail)) 561 mg/kg
The value mentioned relates to the active ingredient triflumuron.

12.2 Persistence and degradability

Biodegradability
Tebuconazole:
Not rapidly biodegradable
Triflumuron:
Not rapidly biodegradable
Koc

Tebuconazole: Koc: 769
Triflumuron: Koc: 8601

12.3 Bioaccumulative potential

Bioaccumulation

Tebuconazole: Bioconcentration factor (BCF) 35 - 59
Does not bioaccumulate.
Triflumuron: Bioconcentration factor (BCF) 612
Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil

Tebuconazole: Slightly mobile in soils
Triflumuron: Immobile in soil

12.5 Other adverse effects

Additional ecological information

No other effects to be mentioned.

SECTION 13. DISPOSAL CONSIDERATIONS

Refillable containers:
If tamper evident seals are broken prior to initial use then the integrity of the contents cannot be assured.
Empty container by pumping through dry-break connection system. Do not attempt to breach the valve system or the filling point, or contaminate the container with water or other products. Ensure that the coupler, pump, meter and hoses are disconnected, triple rinsed and drained after each use. When empty, or contents no longer required, return the container to the point of purchase. This container remains the property of Bayer CropScience Pty Ltd.
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.
Do not reuse container for any other purpose.

SECTION 14. TRANSPORT INFORMATION

ADG

UN number 3082
Transport hazard class(es) 9
Subsidiary Risk None
Packaging group III
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLUMURON SOLUTION)

Hazchem Code ,S

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 3082
Transport hazard class(es) 9
Subsidiary Risk None
Packaging group III
Marine pollutant YES
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLUMURON SOLUTION)

IATA
UN number 3082
Transport hazard class(es) 9
Subsidiary Risk None
Packaging group III
Environm. Hazardous Mark YES
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLUMURON SOLUTION)

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994
Australian Pesticides and Veterinary Medicines Authority approval number: 40408

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

SECTION 16. OTHER INFORMATION

Trademark information Raxil® 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 Road
ATE Acute toxicity estimate
AU OEL Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)
Changes since the last version are highlighted in the margin. This version replaces all previous versions.