Safety Data Sheet

Baytan® T Flowable Seed Dressing

1.1 Product identifier
Trade name: Baytan® T Flowable Seed Dressing
Product code (UVP): 04208706

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

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.

Reproductive toxicity: Category 1B
H360 May damage fertility or the unborn child.

Effects on or via lactation:
H362 May cause harm to breast-fed children.

2.2 Label elements
Hazard label for supply/use required.

Hazardous components which must be listed on the label:
Triadimenol
Triflumuron

Signal word: Danger
Hazard statements
H317 May cause an allergic skin reaction.
H360 May damage fertility or the unborn child.
H362 May cause harm to breast-fed children.

Precautionary statements
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe mist.
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.
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.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulation.

2.3 Other hazards
No additional hazards known beside those mentioned.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature
Triadimenol:Triflumuron 150:4g/l
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>Triadimenol</td>
<td>55219-65-3</td>
<td>13.95</td>
</tr>
<tr>
<td>Triflumuron</td>
<td>64628-44-0</td>
<td>0.41</td>
</tr>
<tr>
<td>Glycerine</td>
<td>56-81-5</td>
<td>&gt; 10.00 - &lt; 20.00</td>
</tr>
<tr>
<td>Synthetic amorphous silica</td>
<td>112926-00-8</td>
<td>1.00</td>
</tr>
<tr>
<td>(Benzylxylo)methanol</td>
<td>14548-60-8</td>
<td>&gt;= 0.05 - &lt;= 0.20</td>
</tr>
<tr>
<td>1,2-Benzisothiazol-3(2H)-one</td>
<td>2634-33-5</td>
<td>&gt;= 0.005 - &lt;= 0.05</td>
</tr>
<tr>
<td>Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one</td>
<td>55965-84-9</td>
<td>&gt;= 0.0002 - &lt;= 0.0015</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

Inhalation Move the victim to fresh air and keep at rest. When symptoms persist or in all cases of doubt seek medical advice.
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. Get medical attention if irritation develops and persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Keep patient warm and at rest. Obtain medical attention.

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: 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 powder, 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. 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. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Hazchem Code: Not applicable

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Precautions: Avoid dust formation. Do not breathe dust. Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.
6.2 Environmental precautions
Contain contaminated water and fire fighting water. 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. Clean contaminated floors and objects thoroughly, observing environmental regulations. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). 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.
Hygiene measures
Avoid contact with skin, eyes and clothing. Wear elbow length PVC gloves when handling product or treated seed. Keep away from food, drink and animal feedingstuffs. 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
Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. 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.

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>Triadimenol</td>
<td>55219-65-3</td>
<td>1.6 mg/m3 (TWA)</td>
<td></td>
<td>OES BCS*</td>
</tr>
<tr>
<td>Triflumuron</td>
<td>64628-44-0</td>
<td>0.2 mg/m3 (TWA)</td>
<td></td>
<td>OES BCS*</td>
</tr>
<tr>
<td>Glycerine (Inhalable mist.)</td>
<td>56-81-5</td>
<td>10 mg/m3 (TWA)</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 (TWA)</td>
<td>12 2011</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
Respiratory protection is not required under anticipated circumstances of exposure. 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, minimum rate of permeability 480 min). 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 6 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>suspension</td>
</tr>
<tr>
<td>Colour</td>
<td>blue</td>
</tr>
<tr>
<td>Odour</td>
<td>weak, characteristic</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>6.0 - 9.0 (100 %) (23 °C)</td>
</tr>
<tr>
<td>Melting point/Range</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Minimum ignition energy</td>
<td>No data available</td>
</tr>
<tr>
<td>Self-accelerating decomposition temperature</td>
<td>No data available</td>
</tr>
</tbody>
</table>
(SADT)
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  ca. 1.10 g/cm³ (20 °C)
Water solubility  miscible
Partition coefficient: n-octanol/water  Triflumuron: log Pow: 4.9 (22 °C)
Triadimenol: log Pow: 3.08 - 3.28
Viscosity, dynamic  140 - 160 mPa.s (20 °C)
Velocity gradient 68.3 /s
Viscosity, kinematic  No data available
Oxidizing properties  No data available
Explosivity  No data available
9.2 Other information  Further safety related physical-chemical data are not known.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity  Stable under normal conditions.
Thermal decomposition  No data available
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  Oxidizing agents, Alkali metals
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
LD50 (Rat)  689 mg/kg
The value mentioned relates to the active ingredient triadimenol.
LD50 (Rat) > 5,000 mg/kg
The value mentioned relates to the active ingredient triflumuron.

Acute inhalation toxicity
LC50 (Rat) > 954 mg/l
Exposure time: 4 h
Highest attainable concentration.
The value mentioned relates to the active ingredient triadimenol.
LC50 (Rat) > 1.55 mg/l
Exposure time: 4 h
Highest attainable concentration.
The value mentioned relates to the active ingredient triflumuron.

Acute dermal toxicity
LD50 (Rat) > 5,000 mg/kg
The value mentioned relates to the active ingredient triadimenol.
LD50 (Rat) > 5,000 mg/kg
The value mentioned relates to the active ingredient triflumuron.

Skin corrosion/irritation
No skin irritation (Rabbit)
The value mentioned relates to the active ingredient triadimenol.
No skin irritation (Rabbit)
The value mentioned relates to the active ingredient triflumuron.

Serious eye damage/eye irritation
No eye irritation (Rabbit)
The value mentioned relates to the active ingredient triadimenol.
No eye irritation (Rabbit)
The value mentioned relates to the active ingredient triflumuron.

Respiratory or skin sensitisation
Non-sensitizing (Guinea pig)
The value mentioned relates to the active ingredient triadimenol.
Non-sensitizing, (Guinea pig)
The value mentioned relates to the active ingredient triflumuron.

Assessment mutagenicity
Triadimenol 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
Triadimenol caused at high dose levels an increased incidence of tumours in mice in the following organ(s): Liver. The increased tumour incidence is not considered to be treatment related.
Triflumuron was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction
Triadimenol caused reduced fertility, reduced lactation rate. The reproduction toxicity seen with Triadimenol is related to parental toxicity.
Triflumuron did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity
Triadimenol caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Triadimenol are related to maternal toxicity.
Triflumuron did not cause developmental toxicity in rats and rabbits.

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

Assessment STOT Specific target organ toxicity – repeated exposure
Triadimenol 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
Harmful if inhaled. May cause respiratory tract irritation. Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. 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
(Lepomis macrochirus (Bluegill sunfish)) 15 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient triadimenol.

(Oncorhynchus mykiss (rainbow trout)) 21.3 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient triadimenol.

(Leuciscus idus (Golden orfe)) > 100 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient triflumuron.
Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 51 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient triadimenol.

LC50 (Daphnia magna (Water flea)) 0.225 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient triflumuron.

Toxicity to aquatic plants

EC50 (Raphidocelis subcapitata (freshwater green alga)) 3.7 mg/l
The value mentioned relates to the active ingredient triadimenol.

EC50 (Scenedesmus quadricauda (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)) > 2,000 mg/kg
The value mentioned relates to the active ingredient triadimenol.

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

Toxic to bees.

12.2 Persistence and degradability

Biodegradability

Triflumuron:
Not rapidly biodegradable

Triadimenol:
Not rapidly biodegradable

Koc

Triflumuron: Koc: 8601
Triadimenol: Koc: 273

12.3 Bioaccumulative potential

Bioaccumulation

Triflumuron: Bioconcentration factor (BCF) 612
Does not bioaccumulate.

Triadimenol: Bioconcentration factor (BCF) 21
Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil

Triflumuron: Immobile in soil
Triadimenol: Moderately mobile in soils

12.5 Other adverse effects

Additional ecological information

No other effects to be mentioned.

SECTION 13. DISPOSAL CONSIDERATIONS

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 deep.
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.

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.

SECTION 14. TRANSPORT INFORMATION

According to national and international transport regulations not classified as dangerous goods.

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994
Australian Pesticides and Veterinary Medicines Authority approval number: 40406

SUSMP classification (Poison Schedule)

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

SECTION 16. OTHER INFORMATION

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

Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways</td>
</tr>
<tr>
<td>ADR</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Road</td>
</tr>
<tr>
<td>ATE</td>
<td>Acute toxicity estimate</td>
</tr>
<tr>
<td>AU OEL</td>
<td>Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)</td>
</tr>
<tr>
<td>CAS-Nr.</td>
<td>Chemical Abstracts Service number</td>
</tr>
<tr>
<td>CEILING</td>
<td>Ceiling Limit Value</td>
</tr>
<tr>
<td>Conc.</td>
<td>Concentration</td>
</tr>
<tr>
<td>EC-No.</td>
<td>European community number</td>
</tr>
<tr>
<td>ECx</td>
<td>Effective concentration to x %</td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Substances</td>
</tr>
<tr>
<td>ELINCS</td>
<td>European list of notified chemical substances</td>
</tr>
<tr>
<td>EN</td>
<td>European Standard</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IBC</td>
<td>International Code for the Construction and Equipment of Ships Carrying Dangerous Goods</td>
</tr>
</tbody>
</table>
Chemicals in Bulk (IBC Code)

ICx  Inhibition concentration to x %
IMDG  International Maritime Dangerous Goods
LCx  Lethal concentration to x %
LDx  Lethal dose to x %
LOEC/LOEL  Lowest observed effect concentration/level
MARPOL  MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.  Not otherwise specified
NOEC/NOEL  No observed effect concentration/level
OECD  Organization for Economic Co-operation and Development
OES BCS  OES BCS: Internal Bayer AG, Crop Science Division “Occupational Exposure Standard”
PEAK  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  Regulations concerning the International Carriage of Dangerous Goods by Rail
SK-SN  Skin sensitizer
SKIN DES  SKINDES: Skin notation: Absorption through the skin may be a significant source of exposure.
STEL  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  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  United Nations
WHO  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.