

## BANNER MAXX

Version 2.0      Revision Date: 19.07.2019      SDS Number: S22037818      This version replaces all previous versions.

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : BANNER MAXX

Design code : A6780D

#### Manufacturer or supplier's details

Company : Syngenta SA (Pty) Ltd

Address : P.O. Box 1044, No. 4 Krokodil drift Avenue  
Brits 0250  
South Africa

Telephone : +27 (0)12 2506 300

Telefax : -

Telefax : -

Emergency telephone number : +27 (0) 86 199 9071

#### Recommended use of the chemical and restrictions on use

Recommended use : Fungicide

### 2. HAZARDS IDENTIFICATION

#### Most important hazards

Danger

H317: May cause an allergic skin reaction.

H360Df: May damage the unborn child. Suspected of damaging fertility.

H411: Toxic to aquatic life with long lasting effects.

#### Other hazards

None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
tetrahydro-2-furyl-methanol	97-99-4	Eye Irrit. 2; H319 Repr. 1B; H360Df	>= 30 - < 50
propiconazole(ISO)	60207-90-1	Acute Tox. 4; H302 Skin Sens. 1; H317 <a href="#">Repr. 1B; H360D</a>	>= 10 - < 20

## BANNER MAXX

Version 2.0      Revision Date: 19.07.2019      SDS Number: S22037818      This version replaces all previous versions.

		Aquatic Acute 1; H400 Aquatic Chronic 1; H410
--	--	---

For explanation of abbreviations see section 16.

### 4. FIRST AID MEASURES

- General advice : Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment.
- If inhaled : Move the victim to fresh air.  
If breathing is irregular or stopped, administer artificial respiration.  
Keep patient warm and at rest.  
Call a physician or poison control centre immediately.
- In case of skin contact : Take off all contaminated clothing immediately.  
Wash off immediately with plenty of water.  
If skin irritation persists, call a physician.  
Wash contaminated clothing before re-use.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Remove contact lenses.  
Immediate medical attention is required.
- If swallowed : If swallowed, seek medical advice immediately and show this container or label.  
Do NOT induce vomiting.
- Most important symptoms and effects, both acute and delayed : Nonspecific  
No symptoms known or expected.
- Notes to physician : There is no specific antidote available.  
Treat symptomatically.

### 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Extinguishing media - small fires  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
Extinguishing media - large fires  
Alcohol-resistant foam  
or  
Water spray
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.
- Specific hazards during firefighting : As the product contains combustible organic components, fire will produce dense black smoke containing hazardous

## BANNER MAXX

Version 2.0	Revision Date: 19.07.2019	SDS Number: S22037818	This version replaces all previous versions.
----------------	------------------------------	--------------------------	--

products of combustion (see section 10).  
Exposure to decomposition products may be a hazard to health.

Specific extinguishing methods : Do not allow run-off from fire fighting to enter drains or water courses.  
Cool closed containers exposed to fire with water spray.

Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Prevent further leakage or spillage if safe to do so.  
Do not flush into surface water or sanitary sewer system.  
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).  
Clean contaminated surface thoroughly.  
Clean with detergents. Avoid solvents.  
Retain and dispose of contaminated wash water.

### 7. HANDLING AND STORAGE

Advice on safe handling : No special protective measures against fire required.  
Avoid contact with skin and eyes.  
When using do not eat, drink or smoke.  
For personal protection see section 8.

Conditions for safe storage : No special storage conditions required.  
Keep containers tightly closed in a dry, cool and well-ventilated place.  
Keep out of the reach of children.  
Keep away from food, drink and animal feedingstuffs.

Further information on storage stability : Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type	Control	Basis
------------	---------	------------	---------	-------

## BANNER MAXX

Version 2.0      Revision Date: 19.07.2019      SDS Number: S22037818      This version replaces all previous versions.

		(Form of exposure)	parameters / Permissible concentration	
propiconazole(ISO)	60207-90-1	TWA	5 mg/m <sup>3</sup>	Syngenta

**Engineering measures** : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

Maintain air concentrations below occupational exposure standards.

Where necessary, seek additional occupational hygiene advice.

### Personal protective equipment

**Respiratory protection** : No personal respiratory protective equipment normally required.  
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

### Hand protection

Material : Nitrile rubber  
Break through time : > 480 min  
Glove thickness : 0,5 mm

**Remarks** : Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. 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. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

**Eye protection** : No special protective equipment required.

**Skin and body protection** : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.  
Remove and wash contaminated clothing before re-use.  
Wear as appropriate:  
Impervious clothing

**Protective measures** : The use of technical measures should always have priority over the use of personal protective equipment.

**BANNER MAXX**

Version 2.0      Revision Date: 19.07.2019      SDS Number: S22037818      This version replaces all previous versions.

When selecting personal protective equipment, seek appropriate professional advice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	:	liquid
Colour	:	yellowish to orange
Odour	:	aromatic, like solvent
Odour Threshold	:	No data available
pH	:	5 - 9 Concentration: 1 % w/v
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	Method: Pensky-Martens closed cup does not flash
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Density	:	1,09 g/cm <sup>3</sup> (20 °C)
Solubility(ies) Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	280 °C
Decomposition temperature	:	No data available
Viscosity Viscosity, dynamic	:	25,6 mPa.s ( 40 °C)

**BANNER MAXX**

Version 2.0      Revision Date: 19.07.2019      SDS Number: S22037818      This version replaces all previous versions.

---

59,8 mPa.s ( 20 °C)

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Surface tension : 37,8 mN/m, 0,1 %, 20 °C  
38,3 mN/m, 1 %, 20 °C

---

**10. STABILITY AND REACTIVITY**

Reactivity : None reasonably foreseeable.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

Conditions to avoid : No decomposition if used as directed.

Incompatible materials : None known.

Hazardous decomposition products : No hazardous decomposition products are known.

---

**11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure : Ingestion  
Inhalation  
Skin contact  
Eye contact

**Acute toxicity****Product:**

Acute oral toxicity : LD50 (Mouse, male): 2.330 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 1,08 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2.020 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

**BANNER MAXX**

Version 2.0      Revision Date: 19.07.2019      SDS Number: S22037818      This version replaces all previous versions.

---

**Components:****propiconazole(ISO):**

- Acute oral toxicity : LD50 (Rat, female): 550 mg/kg
- Acute inhalation toxicity : LC50 (Rat, male and female): > 5,8 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity
- Acute dermal toxicity : LD50 (Rat, male and female): > 5.000 mg/kg

**Skin corrosion/irritation****Product:**

- Species : Rabbit  
Result : No skin irritation

**Components:****propiconazole(ISO):**

- Species : Rabbit  
Result : No skin irritation

**Serious eye damage/eye irritation****Product:**

- Species : Rabbit  
Result : No eye irritation

**Components:****tetrahydro-2-furyl-methanol:**

- Result : Eye irritation

**propiconazole(ISO):**

- Species : Rabbit  
Result : No eye irritation

**Respiratory or skin sensitisation****Product:**

- Test Type : Buehler Test  
Species : Guinea pig  
Result : The product is a skin sensitiser, sub-category 1B.

**Components:****propiconazole(ISO):**

- Species : Guinea pig

**BANNER MAXX**

Version 2.0      Revision Date: 19.07.2019      SDS Number: S22037818      This version replaces all previous versions.

---

Result : The product is a skin sensitiser, sub-category 1B.

**Germ cell mutagenicity****Components:****propiconazole(ISO):**

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

**Carcinogenicity****Components:****propiconazole(ISO):**

Carcinogenicity - Assessment : Weight of evidence does not support classification as a carcinogen

**Reproductive toxicity****Components:****tetrahydro-2-furyl-methanol:**

Reproductive toxicity - Assessment : Clear evidence of adverse effects on development, based on animal experiments., Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

**propiconazole(ISO):**

Reproductive toxicity - Assessment : Some evidence of adverse effects on development, based on animal experiments.

**STOT - single exposure****Components:****propiconazole(ISO):**

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

**STOT - repeated exposure****Components:****propiconazole(ISO):**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.



## BANNER MAXX

Version 2.0      Revision Date: 19.07.2019      SDS Number: S22037818      This version replaces all previous versions.

### 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

##### Product:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 25 mg/l  
Exposure time: 96 h
- LC50 (Lepomis macrochirus (Bluegill sunfish)): 36 mg/l  
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna Straus): 8,5 mg/l  
Exposure time: 48 h
- Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 44 mg/l  
Exposure time: 96 h
- NOEC (Pseudokirchneriella subcapitata (green algae)): 0,46 mg/l  
Exposure time: 96 h

##### Components:

##### **propiconazole(ISO):**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4,3 mg/l  
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Americamysis): 0,51 mg/l  
Exposure time: 96 h
- Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 8,9 mg/l  
Exposure time: 96 h
- NOEC (Pseudokirchneriella subcapitata (green algae)): 0,13 mg/l  
End point: Growth rate  
Exposure time: 96 h
- M-Factor (Acute aquatic toxicity) : 1
- Toxicity to fish (Chronic toxicity) : NOEC (Cyprinodon variegatus (sheepshead minnow)): 0,068 mg/l  
Exposure time: 95 d
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Americamysis): 0,11 mg/l  
Exposure time: 28 d
- M-Factor (Chronic aquatic toxicity) : 1

**BANNER MAXX**

Version 2.0      Revision Date: 19.07.2019      SDS Number: S22037818      This version replaces all previous versions.

---

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l  
Exposure time: 3 h

**Ecotoxicology Assessment**

Acute aquatic toxicity : Very toxic to aquatic life.

**Persistence and degradability****Components:****propiconazole(ISO):**

Biodegradability : Result: Not readily biodegradable.

**Bioaccumulative potential****Components:****propiconazole(ISO):**

Bioaccumulation : Remarks: Medium bioaccumulation potential.

Partition coefficient: n-octanol/water : log Pow: 3,72 (25 °C)

**Mobility in soil****Components:****propiconazole(ISO):**

Distribution among environmental compartments : Remarks: Low to medium mobility in soil.

Stability in soil : Dissipation time: 66 - 170 d  
Percentage dissipation: 50 % (DT50)  
Remarks: Product is not persistent.

**Other adverse effects****Components:****propiconazole(ISO):**

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

---

**13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Do not contaminate ponds, waterways or ditches with chemical or used container.  
Do not dispose of waste into sewer.  
Where possible recycling is preferred to disposal or

## BANNER MAXX

Version	Revision Date:	SDS Number:	This version replaces all previous versions.
2.0	19.07.2019	S22037818	

incineration.  
If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Empty remaining contents.  
Triple rinse containers.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Do not re-use empty containers.

### 14. TRANSPORT INFORMATION

#### International Regulations

##### UNRTDG

UN number : UN 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROPICONAZOLE)  
Class : 9  
Packing group : III  
Labels : 9

##### IATA-DGR

UN/ID No. : UN 3082  
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s. (PROPICONAZOLE)  
Class : 9  
Packing group : III  
Labels : Class 9 - Miscellaneous dangerous substances and articles  
Packing instruction (cargo aircraft) : 964  
Packing instruction (passenger aircraft) : 964  
Environmentally hazardous : yes

##### IMDG-Code

UN number : UN 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROPICONAZOLE)  
Class : 9  
Packing group : III  
Labels : 9  
EmS Code : F-A, S-F  
Marine pollutant : yes

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

#### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.



**BANNER MAXX**

Version	Revision Date:	SDS Number:	This version replaces all previous versions.
2.0	19.07.2019	S22037818	

Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

ZA / EN