

Suite 822, St Kilda Road Tower, 1 Queens Road, Melbourne, VIC 3004

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SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1. Product identifiers

Product name : Sanonda Fungicide Propiconazole 250 EC

Active ingredient : Propiconazole

Product code :

1.2. Other means of identification

IUPAC Chemical name: (±)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1*H*-1,2,4-triazole

1.3. Recommended use of the chemical and restrictions on use

On cereals, it controls diseases caused by *Cochliobolus sativus*, *Erysiphe graminis*, *Leptosphaeria nodorum*, *Puccinia* spp., *Pyrenophora teres*, *Pyrenophora tritici-repentis*, *Rhynchosporium secalis* and *Septoria* spp. In bananas, control of *Mycosphaerella musicola* and *Mycosphaerella fijiensis* var. *difformis*. Other uses are in rice, against *Rhizoctonia solani*, *Helminthosporium oryzae* and dirty panicle complex; in peanuts, against *Cercospora* spp.; in stone fruit, against *Monilinia* spp., *Podosphaera* spp., *Sphaerotheca* spp. and *Tranzschelia* spp.; and in maize, against *Helminthosporium* spp.

1.4. Details of the supplier of the safety data sheet

Sanonda (Australia) Pty Ltd (ABN 23 059 813 973)

Address: Suite 822, St Kilda Road Towers, No. 1 Queens Road, Melbourne,

Victoria 3004 Australia.

TEL: +61 3 9863 8081 FAX: +61 3 9863 8083 email@sanondaoz.com

1.4. Emergency telephone number

Emergency number : +61 3 9863 8081

SECTION 2: Hazards identification

2.1. GHS classification of the substance or mixture

Acute toxicity : Category 4
Skin sensitizer : Category 1B
Acute aquatic toxicity : Category 1



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Hazardous to the aquatic environment (chronic) : Category 4

2.2. Label elements

Signal word : Warning

Hazard statements (CLP) : H302: Harmful if swallowed.

H317: May cause sensitization by skin contact.

H400: Very toxic to aquatic organisms.

H413: May cause long-term adverse effects in the aquatic

environment.

Precautionary statements : P102: Keep out of reach of children.

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P261: Avoid breathing fumes, mists, vapours or spray.

P264: Wash contacted areas thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P285: In case of inadequate ventilation wear respiratory Protection.

P301: If swallowed.

P302: If on skin.

P304: If inhaled.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P313: Get medical advice/attention.

P333: If skin irritation or a rash occurs.

P352: Wash with soap and water.

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P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

P302+352: If on skin, wash with soap and water.

P332+313: If skin irritation or a rash occurs, get medical advice/attention.

Hazard pictogram : Environment Exclamation mark





SECTION 3: Composition/information on ingredients

Identity of chemical ingredients	CAS	Concentration
Propiconazole	60207–90–1	250g/L
Hydrocarbon liquid	-	600g/L
Non-hazardous surfactants	-	Balance

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

In Case Of Emergency Dial 000 and/or Poisons Information Centre: Phone: +61 3 9863 8081 and speak to a Poisons Information Specialist with a copy of this SDS or chemical Label.

If inhaled

Move affected person to fresh air and keep at rest until recovered. If inhaled remove to fresh air and keep at rest. Obtain medical advice if at all worried. If not breathing give artificial respiration and get urgent medical attention.

In case of skin contact

Remove contaminated clothing and wash affected areas thoroughly with soap and water. Seek medical attention if symptoms persist.

In case of eye contact

If product gets in eyes, remove contact lenses if wearing and wash it out immediately with water for several minutes. Seek medical attention.

If swallowed

If swallowed, **Do Not** induce vomiting. Rinse mouth out with water if patient is conscious. Seek urgent medical attention.

Advice to Doctor



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Treat symptomatically. No specific antidote.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms of poisoning with Propiconazole include burning sensation and reddening of skin in mouth and throat, headache, irritation of nose and throat and increased secretion of mucous in the nose and throat, itchiness and reddening of contacted skin, stinging and reddening of eyes and watering which may become copious.

4.3. Indication of any immediate medical attention and special treatment needed

Call a physician or poison control center immediately.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, dry chemical, foam, water fog.

5.2. Special hazards arising from the substance or mixture

Fire hazard : This product is classified as a C1 combustible product. Violent steam

generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances. Fire decomposition products from this product may be toxic if inhaled. Take

appropriate protective measures.

Explosive hazard : Product is not explosive.

Reactivity : The product is stable at normal handing-and storage conditions.

5.3. Special protective equipment and precautions for fire fighters

Fire fighters should wear Safe Work Australia approved self-contained breathing apparatus (AS/NZS 1715/1716) and full protective equipment.

Keep unnecessary people away.

If it can be done safely, remove intact containers from the fire. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of extinguishing agent and spillage safely later. Contamination of water bodies should be avoided.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of spillage it is important to take all steps necessary to:

Instruct and ensure all bystanders to keep away from and upwind of spill/leak.



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Avoid eye and skin contact;

Do not breath dust:

Ensure adequate ventilation;

Avoid contamination of waterways.

Refer to Section 8 for Personal Protection Equipment (PPE).

6.2. Environmental precautions

Avoid contamination of waterways, drains and sewers.

6.3. Methods and materials for containment and cleaning up

Reposition any leaking containers so as to minimise leakage.

Dam and absorb spill with an absorbent material (eg sand or soil).

Shovel the absorbed spill and material into sealable open-top containers for disposal.

Dispose of at a landfill in accordance with local regulations. Refer Section 13.

Place damaged containers in recovery bins (if available) and if necessary return to Grow Choice.

Use vacuum equipment with high efficiency particulate air filters or sweep up without dust generation. Collect in a suitable, closed container to dispose and clean the spilled area with water.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Safe work practices are recommended.

Avoid contact with eyes and skin.

When opening the container and preparing spray wear appropriate PPE (refer Section 8).

Do not spray under high wind conditions.

Hygiene measures:

When using products, do not eat, drink or smoke.

Contaminated work clothing should not be allowed out of the workplace.

Wash hands thoroughly with soap and water after use and before eating, drinking, smoking/using tobacco, chewing gum, using the toilet or applying cosmetics.

After each day's use, wash gloves, face shield or goggles and contaminated clothing.

Avoid contact with eyes and skin.

7.2. Conditions for safe storage, including any incompatibilities

Keep out of reach of children, unauthorised persons and animals.



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Store in tightly sealed original containers in a dry secure place away from fertilizers, feed and food.

Store out of direct sunlight and extreme temperature.

Always read the label and any attached leaflet before use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters-exposure standards, biological monitoring

No biological exposure limit allocated. No exposure standard has been established for this product.

Control process conditions to avoid contact. Use in a well-ventilated area only. Use local exhaust ventilation to keep exposure levels below the exposure limits above.

8.2. Appropriate engineering controls

When opening the container, preparing the spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC chemical resistant and face shield or goggles.

8.3. Personal Protection Equipment

When using the prepared spray cotton overalls buttoned to the neck and wrist and a washable hat and optional once chemical is prepared for use, elbow length PVC chemical resistant and face shield or goggles if protected from spray drift/contamination.

Face and Eye Protection: Face shield or goggles.

Clothing: Cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat.

Gloves: Elbow-length chemical resistant PVC gloves.

Respiratory: If airborne concentrations are likely to exceed the exposure standards above or if exposed to dust, an

AS/NZS 1715/1716 approved respirator should be worn.

Recommended to use Australian and New Zealand Standard PPE:

Overalls AS 3765, Clothing for protection against Hazardous chemicals

Gloves: AS/NZS 2161, Industrial safety gloves and mittens (not electrical and medical gloves)

Goggles and face shield As/NZS 1337, Eye protectors for industrial applications.

Footwear AS/NZS 2210, Occupational protective footwear

Respirators AS NZS 1715 Selection, Use and Maintenance of Respiratory Protective Devices

AS/NZS 1716, Respiratory Protective Devices

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

a) Appearance : Light yellow to dark yellow liquid



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b) Odour : Aromatic odour

c) Odour Threshold : Not available

d) pH : 4.0-8.0

e) Specific gravity : 0.9-1.0g/ml @ 20°C

f) Initial boiling point and boiling range : Not available

g) Flammability (solid, gas) : 60 °C

h) Vapour density : Not availablei) Viscosity : Not available

9.2. Additional parameters

Wet sieve test: 2% retained on a 75 µm test sieve.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Reaction of the concentrate or spray mix with alkali will largely de-activate the product.

10.3. Incompatible materials and possible hazardous reactions

Strong acids, strong bases and strong oxidising agents. Avoid contact of the concentrate with strong alkalis and alkaline materials such as lime. Does not polymerise.

10.4. Conditions to avoid

Keep away from heat and naked flame.

10.5. Hazardous decomposition products

This product is will decompose when burnt. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Also nitrogen and its compounds and oxides, in some circumstances hydrogen cyanide gas.

SECTION 11: Toxicological information

11.1. Information on routes of exposure and symptoms related to exposure

No harmful effects are expected if the precautions on the label and the SDS are followed.

11.2. Immediate, delayed and chronic health effects from exposure

Acute toxicity of Propiconazole:

LD ₅₀ oral rats	1517 mg/kg
LD ₅₀ dermal rats	>4000 mg/kg



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LC ₅₀ inhalation rats	$(4hr) > 5800 \text{ mg/m}^3$
Eye irritation	Non-irritating to eyes.
Skin irritation	Non-irritating to skin.

CANCER INFORMATION: Long-term exposure of mice to high dose levels of propiconazole produced an increase in liver tumors in male mice. Propiconazole is not considered to be carcinogenic.

TERATOLOGY (BIRTH DEFECTS): Developmental toxicity in rats and rabbits was observed only at maternally toxic dose levels of propiconazole technical.

REPRODUCTIVE EFFECTS: No reproductive toxicity was observed in a study with rats exposed to propiconazole technical for two generations.

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): Propiconazole technical does not present any genetic hazard to intact animal systems.

11.3. Exposure Levels/Chronic effects

Extensive tests on laboratory mammals at high doses, an increased liver tumour incidence in mice was observed. However, this effect was considered specific to the species studied and not relevant to humans.

In two-year feeding studies, the NOEL was established at 100 ppm. No tumours were observed in rats at any feeding level. EPA has classified Propiconazole as Group "C" for carcinogenicity – possible human carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Ecotoxicity

LC ₅₀ fish	LC ₅₀ (96 h) for carp 6.8, rainbow trout 4.3, golden orfe 5.1, sprotte (<i>Leiostomus xanthurus</i>) 2.6 mg/l for Propiconazole.
LC ₅₀ daphnia	EC ₅₀ (48 h) for Daphnia 10.2 mg/l for Propiconazole.
EC ₅₀ algae	EC ₅₀ (3 d, 250 EC solo formulation) for <i>Pseudokirchneriella subcapitata</i> 2.05 mg/l
	for Propiconazole.
Other Organisms	LD ₅₀ (contact and oral) for bees >100 μg/bee for Propiconazole. LC ₅₀ (14 d) for
	Eisenia foetida 686 mg/kg dry soil for Propiconazole.

12.2. Persistence and degradability

Soil DT_{50} (aerobic, 20–25 °C, lab.) 29–128 d; (field) 5–148 d. Immobile in soil; normalised $K_{oc\ (ads)}$ 950 ml/g. DT_{50} from water 5.5–6.4 d (sorption to sediment), from sediment 485–636 d. Hydrolytically stable in water; photolytic DT_{50} in sterile natural water 18 d (latitude 30–50° N) The main degradation pathways are hydroxylation of the propyl side-chain and the dioxolane ring, leading finally to formation of 1,2,4-triazole.



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In plant, degradation proceeds through hydroxylation of the *n*-propyl side-chain and deketalisation of the dioxolan ring. After cleavage of triazole, triazole-alanine is formed as the main metabolite. Metabolites are conjugated mostly as glucosides.

12.3. Bioaccumulative potential

An estimated BCF of 146 was calculated for Propiconazole (SRC), using a log Kow of 3.72 and a regression-derived equation. This BCF suggests the potential for bioconcentration in aquatic organisms is high.

12.4. Mobility in soil

Measured Koc values of Propiconazole ranged from 1,200-8,100(SRC). These Koc values suggest that Propiconazole is expected to have slight to no mobility in soil.

12.5. Other adverse effects

No further information.

SECTION 13: Disposal considerations

13.1. Safe handling and disposal methods

On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).

13.2. Disposal of any contaminated packaging

Do not use this container for any other purpose. Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations.

13.3. Environmental regulations

drumMUSTER is the national program for the collection and recycling of empty, cleaned, non-returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, puncture or shred and bury containers in local authority landfill. If no landfill is available, bury the containers below 500mm 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

14.1. UN number



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UN-No. : 1993

14.2. UN proper shipping name

Flammable liquid, N.O.S.

14.3. Transport hazard class(es)

Class (UN) : 3
Hazard labels (UN) : 3



14.4. Packaging group

Packing group (UN) : III

14.5. Environmental hazards

Dangerous for the environment : Yes.

IMDG Marine pollutant : Yes.

Other information : No.

14.6. Special precautions for user

Avoid contacting with skin. May cause sensitization by skin contact.

14.7. Hazchem Code

Not allocated.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a schedule 6 poison. This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 65538. This product is classified as a Hazardous Substance under the criteria of Safe Work Australia. Xn: Harmful.

This product is not classified as a Dangerous Good according to the ADG Code (7 th Ed).

15.2. Poisons Schedule number

This product is a Schedule 6 Poison (S6) and must be stored, transported and sold in accordance with the relevant Health Department regulations.



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SECTION 16. OTHER INFORMATION

16.1. Date of preparation or last revision of SDS

Revised 13/12/2016

Revisions Highlighted: The SDS was reviewed to include GHS requirements.

16.2. Contact Point

Sanonda (Australia) Pty Ltd

Suite 822, St Kilda Road Towers,

No.1 Queens Road, Melbourne, VIC 3004

Telephone: 03 9863 8081 Facsimile: 03 9863 8083

16.3. Key/legend to abbreviations and acronyms used in the SDS

ADG Code: Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail)

IMDG Code: International Maritime Dangerous Goods

This SDS contains only safety-related information. For other data see product literature.

All due care and skill, so far as practicable, has been applied in the preparation and collation of the information in this SDS. Each user of the Product named in this SDS should read and consider the information contained in this SDS in the context of how the Product will be stored, handled, used or applied in the workplace. In all circumstances, it is the responsibility of the user of the Product to ensure that they have sought out the relevant safety data appropriate to their particular situation. Nothing contained in this SDS shall be construed as a representation or recommendation to the user about the suitability or otherwise of the Product named in this SDS for the user's particular situation. If the user requires any clarification or further information, the user should contact Sanonda (Australia) Pty Ltd.

National Poisons Information Centre: Dial 13 11 26 (from anywhere in Australia)

Please read all labels carefully before using product.