

MATERIAL SAFETY DATA SHEET

Company Details

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Hazardous according to the criteria of Worksafe Australia.

I IDENTIFICATION

Product Name: Aurora 250 EC Systemic Fungicide

Other Names: None.

Product Code: None.

UN No: None allocated

Hazchem Code: None allocated

Dangerous Goods Class: None allocated

Sub Risk Class: None allocated

Packaging Group: None allocated

Poison Schedule: S6

Chemical Family: Blend of ingredients (see below). Active ingredient is an azole derived fungicide.

Uses: Systemic fungicide for use in agriculture as directed on the product label.

Physical Appearance & Properties

Appearance & Odour: Clear amber liquid. Characteristic odour.

Melting/softening point: No specific data. Liquid at normal temperatures.

Boiling point and vapour pressure: No data.

Volatile materials: No specific data. Expected to be low at 100°C.

Flashpoint: >64°C

Specific gravity: 0.99-1.00 at 20°C

Solubility in water: Emulsifiable.

Corrosiveness: Not corrosive.

Ingredients	CAS No	Proportion, %	Worksafe Exposure Limits	
			TWA, mg/m ³	STEL, mg/m ³
Chemical Entity				
Propiconazole	60207-90-1	25	not set	not set
Ethoxylated castor oil	61791-12-6	10-20	not set	not set
Non hazardous surfactant	secret	<10	not set	not set
Non hazardous hydrocarbon	secret	577	not set	not set

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

II HEALTH HAZARD DATA

Health Effects:

No specific data is available for the product for chronic exposure symptoms. The ingredients are not listed as carcinogenic in Worksafe's document "Exposure Standards for Atmospheric Contaminants in the Occupational Environment" (May 1995).

The following comments relate to Propiconazole, which is the active ingredient in this product. Studies have shown that this product does not significantly increase the incidence of mutations in offspring and is therefore classed as not Mutagenic. Studies have shown that this product and its ingredients is not Teratogenic. It does not significantly increase the incidence of non-heritable birth defects in offspring. Studies have shown that this product does not significantly increase the incidence of sensitisation in test animals and is therefore classed as not-sensitising.

Acute Effects:

Swallowed: Data suggests that this product should present no significant problems to typical persons in normal use.

MATERIAL SAFETY DATA SHEET

Eye: This product is irritating to the eyes. It will cause discomfort such as stinging pain, watering and redness of the eyes. Effects may last after exposure has ceased, and in severe exposure, long lasting or even permanent effects such as corneal damage can occur.

Skin: This product may irritate skin. However, it is unlikely to cause any more than mild transient discomfort. It is also unlikely to cause any significant lasting effects. Prolonged and repeated skin contact may cause dermatitis due to defatting effect of solvent and surfactant.

Inhalation: Data indicates that this product may be irritating if inhaled. May lead to minor discomfort which should quickly disappear once exposure has ceased.

LD₅₀ Oral (Rat) = 1517mg/kg

LD₅₀ Oral (Mouse) = 1490mg/kg

LC₅₀ Inhalation (Rat) >5800mg/L/4hr

First Aid:

Eyebaths or eyewash stations should be provided where this product is being used.

If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 13 1126 from anywhere in Australia.

Eyes: If this product comes into contact with eyes, hold open and wash with running water for at least 15 minutes. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. Seek medical attention.

Skin: If product gets on skin, thoroughly wash contacted areas. No further measures should normally be required unless irritation is noticed. If irritation persists, seek medical attention.

Inhalation: No first aid measures normally required. However, if vapours or mists have been inhaled, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Advice to Doctor: Treat symptomatically. Note the nature of this product.

III PRECAUTIONS FOR USE

Risk Phrases are: R36. Irritating to eyes.

Exposure Standards:

A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by Worksafe Australia for any of the major ingredients in this product. There is a blanket limit of 10mg/m³ for dusts or mists when limits have not otherwise been established. The nature of this product makes it unlikely that this level will be approached in normal use. The ADI (Acceptable Daily Intake) for Propiconazole is set at 0.04mg/kg/day. The corresponding NOEL (No-observable-effect-level) is set at 4mg/kg/day. Values taken from Australian ADI List, May 1998.

Engineering Controls:

In industrial situations, concentration values below the TWA value should be maintained. Values may be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify the process or environment to reduce the problem.

Personal Protection:

Respiratory Protection: Do not inhale spray mist. The use of a dust or vapour mask is suggested when this product is being used, especially if in confined or dusty spaces. For help in selecting suitable equipment, consult AS/NZS 1715.

Protective Gloves: Impermeable protective gloves should be worn when you are using this product, to prevent irritation. For help in selecting suitable equipment, consult AS 2161.

Eye Protection: Protective eyewear should be worn when using this product. Eye contact may prove painful and dangerous and should be avoided. Consult AS1336 and AS/NZS 1337 for advice on Industrial Eye Protection.

Clothing: This product is essentially safe to use without special protective clothing. However, its use is recommended as a good industrial practice. Consult AS2919 for advice on Industrial Clothing.

Safety Boots: Wearing safety boots in industrial situations is advisory. Consult AS/NZS2210 for advice on Occupational Protective Footwear.

Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

IV SAFE HANDLING INFORMATION

Safety Phrases are: S24/25. Avoid contact with skin and eyes.

MATERIAL SAFETY DATA SHEET

Storage & Transport

No special storage and transport requirements. This product has no UN classification. This product is a S6 Poison. Observe all relevant regulations regarding sale, transport and storage of this class of product. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames, and make sure that the product does not come into contact with substances listed under "Materials to avoid" below.

Spills & Disposals

In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Wear full protective clothing including face mask, face shield and gauntlets. All skin areas should be covered. Thoroughly launder protective clothing before storage or re-use. See above under Personal Protection regarding Australian Standards relating to personal protective equipment. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Dispose of only in accord with all regulations. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Fire & Explosion Hazard

There is a slight risk of an explosion from this product if it is involved in a fire.

Flashpoint: >64°C

Flammability limits: Not applicable. This product is not flammable.

Extinguishing Media: carbon dioxide, dry chemical, foam, water fog.

Special Fire Fighting procedures: If a significant quantity of this product is involved in a fire, call the fire brigade.

Immediately evacuate the area of unnecessary personnel. When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and respirator. All skin areas should be covered.

Unusual Fire & Explosion Hazards: Fire decomposition products from this product may form toxic and corrosive mixtures in confined spaces. 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.

Stability: This product is unlikely to spontaneously decompose.

Polymerisation: This product is unlikely to spontaneously polymerise.

Decomposition Products: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen, and under some circumstances, oxides of nitrogen. Small quantities of hydrogen chloride gas, chlorides, and in some circumstances, phosgene which is a toxic gas. Water.

Materials to avoid: strong oxidising agents.

V OTHER INFORMATION

This MSDS is prepared in accord with the Worksafe Australia document "National Code of Practice for the Preparation of Material Safety Data Sheets", 1994.

Contact Points:

Call Farmoz on (02)9363 3611 Fax: (02)9363 5977

Ask for Russel Brown, Technical Manager.

Police and Fire Brigade: Dial 000

**If ineffective: Dial Poisons Information Centre
(13 1126 from anywhere in Australia)**

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Please read all labels carefully before using product.

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