



## SAFETY DATA SHEET

### Section 1. Identification of the material and the supplier

Product: **AURORA 250 EC Fungicide**  
Item Code:  
Product Use: Fungicide  
Restriction of Use: Refer to Section 15

New Zealand Supplier: ADAMA New Zealand Ltd  
Address: Level 1/93 Bolt Road  
Tahunanui, Nelson 7011

Telephone: +64 3 543 8275  
Fax Number: +64 3 543 8274

**Emergency Telephone: 0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 18 July 2018

### Section 2. Hazards Identification

**This substance is hazardous according to the Hazardous Substances (Classification) Notice 2017**

**EPA Approval No:** HSR000596

#### Pictograms



Chronic



Ecotoxic

Signal Word: **Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1E (oral)	H303	May be harmful if swallowed.	Acute Tox. 5
6.9B	H373	May cause damage to organs through prolonged or repeated exposure.	STOT RE 2
9.1A	H400	Very toxic to aquatic life.	Aquatic Acute 1

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe fumes, vapours or spray.
P273	Avoid release to the environment.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.

P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P391	Collect spillage.

Storage Code	Storage Statement
None allocated	Store in original, unopened container in cool, dry place, well ventilated place, out of direct sunlight and away from stockfeed or foodstuffs. (< 50°C)

Disposal Code	Disposal Statement
P501	Triple rinse empty container and add rinsate to spray tank. Burn in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill, or if appropriate, recycle. Avoid contamination of any water supply with product or empty container.

### Section 3. Composition / Information on Ingredients

Ingredients	Value	CAS NUMBER.
Propiconazole	250g/L	60207-90-1
caABS/n-Butanol	3.5%	-

### Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for several minutes. Call a POISON CENTER or doctor/physician if required.
If on Skin	Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention.
If Swallowed	Do NOT induce vomiting. Wash out mouth with plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

#### Most important symptoms and effects, both acute and delayed

##### Symptoms:

<b>Ingestion:</b>	May be harmful if swallowed.
<b>Skin:</b>	Not applicable.
<b>Inhalation:</b>	Not applicable.
<b>Eyes:</b>	Not applicable.
<b>Chronic:</b>	May cause damage to organs through repeated or prolonged exposure.

### Section 5. Fire Fighting Measures

<b>Hazard Type</b>	Non Flammable.
<b>Hazards from combustion products</b>	When heated to decomposition, emits dangerous fumes: carbon dioxide, carbon monoxide, chlorides, and nitrogen oxides.
<b>Suitable Extinguishing media</b>	Water spray, water fog, foam.
<b>Precautions for firefighters and special protective clothing</b>	Wear proper protective equipment. Self-contained breathing apparatus. Fight fires from protected location. Dike fire control water for later disposal.

**Section 6. Accidental Release Measures**

Wear full protective clothing as detailed in Section 8. Evacuate area from unnecessary personnel.

**Environmental precautions**

Dispose of this material and its container at hazardous or special waste collection point, in accordance with national and regional regulations. If the product has contaminated surface water, inform the appropriate authorities. Contaminated soil layers have to be dug out.

**Methods and material for containment and cleaning up**

In the event of minor spillage. Absorb remainder in sand or other inert material. Use appropriate container to avoid environmental contamination. In the event of major spillage: Collect and contain as much free liquid as possible. Dike spills using absorbent or impervious materials such as sand or clay for later disposal. Dispose of in an authorised waste collecting point.

**Section 7. Handling and Storage****Precautions for Handling:**

- Read label before use.
- Do not breathe fumes, vapours or spray.
- Avoid release to the environment.

**Precautions for Storage:**

- Store away from incompatible materials listed in Section 10.
- Keep away from children.
- Store in original, unopened container in cool, dry place, well ventilated place, out of direct sunlight and away from stockfeed or foodstuffs. (< 50°C).
- Preferred Packaging: Co extruded polyethylene bottles., drums with polyethylene liner, resin-lined metal drums.

**Section 8 Exposure Controls / Personal Protection****WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

Substance	TWA		STEL	
	ppm	mg/m3	ppm	mg/m3

None of the ingredients have workplace exposure limits listed on WES.

Workplace Exposure Standard – Time Weighted Average (WES-TWA). *The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.* Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). *The 15-minute average exposure standard.* Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

**Engineering Controls**

Ensure good ventilation is available.

**Personal Protection Equipment****Eyes**

Safety goggles or chemical goggles.

<b>Hands and Skin</b>	Chemical resistant gloves. Wear suitable protective clothing. Chemical resistant boots.
<b>Respiratory</b>	During spraying wear suitable respiratory equipment.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Liquid
<b>Odour</b>	Clear - tan
<b>Odour Threshold</b>	Solvent
<b>pH</b>	4 - 5
<b>Boiling Point</b>	Propiconazole: Decomposes at elevated temperatures (>300°C)
<b>Melting Point</b>	Not applicable
<b>Flash Point</b>	107°C (closed cup)
<b>Flammability</b>	Not flammable
<b>Upper and Lower Exposure Limits</b>	Not applicable
<b>Vapour Pressure</b>	Propiconazole: $2.1 \times (10)^{-4}$ Pa (20°C - pure)
<b>Density</b>	0.98 - 1.00 g/ml
<b>Relative Density</b>	Not applicable
<b>Solubilities</b>	Emulsifiable Propiconazole: 150 g/ml (20°C - pure)
<b>Partition Coefficient:</b>	0.85 (21°C OECD 117 (n-octanol/water))
<b>Auto-ignition Temperature</b>	265°C
<b>Viscosity, dynamic</b>	Not applicable
<b>Particle Characteristics</b>	Not applicable
<b>Log P Octanol</b>	Propiconazole: 3.51

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This product is stable under normal conditions.
<b>Conditions to Avoid</b>	Protect from (sun) light, open flame and sources of heat. Decomposes upon heating.
<b>Incompatible Materials</b>	Avoid contact with: strong bases and strong acids.
<b>Hazardous Decomposition Products</b>	Thermal decomposition generates: carbon monoxide, carbon dioxide, Chlorides, nitrogen oxides oxidizing agents.

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	May be harmful if swallowed.
<b>Dermal</b>	Not applicable
<b>Inhalation</b>	Not applicable
<b>Eye</b>	Not applicable
<b>Skin</b>	Not applicable

### Chronic Effects:

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Not applicable.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	May cause an damage to organs through prolonged or repeated exposure.

### Preparation

Acute toxicity - Oral: LD50 (rat) >2,000 mg/kg  
 Acute toxicity - Dermal: LD50 (rat) >2,000 mg/kg  
 Acute toxicity - Inhalation: LC50 (rat) 9.46 mg/L/4h  
 Skin irritation: Slightly irritating (rabbit).  
 Eye irritation: Slightly Irritating (rabbit).  
 Sensitization: Non Sensitizer (Guinea-pig)  
 Carcinogenicity: Not carcinogenic  
 Mutagenicity: Not mutagenic  
 Reproductive toxicity: Not teratogenic in animal experiments

## Section 12. Ecotoxicological Information

HSNO Classes: 9.1A = Very toxic to aquatic life.

Toxicity/effect	Endpoint / Time/ Value / Unit / Organism
Toxicity to fish	LC50 96 H = 3.72mg/l
Toxicity to daphnia	EC50 (daphnia magna) = 48h = 26mg/l
Toxicity to algae	ErC50 = 72h >2.53mg/l
Toxicity to Birds	>2000mg/kg
Toxicity to Bees	Not toxic to bees
Persistence and degradability	Rapidly degrades when exposed to sunlight and UV light
Bioaccumulative potential:	BCF < 100
Mobility in soil	Product does not leach to ground water

Do not allow to enter waterways.

## Section 13. Disposal Considerations

**Disposal Method:** Triple rinse empty container and add rinsate to spray tank. Burn in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill, or if appropriate, recycle. Avoid contamination of any water supply with product or empty container.

**Precautions:** Do not allow product to enter waterways.

**Disposal methods to avoid:** Do not allow product to enter waterways.

## Section 14 Transport Information

**This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012**



### Road and Rail Transport

UN No: 3082  
 Class-primary: 9  
 Packing Group: III  
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROPICONAZOLE)

### Air Transport

UN No: 3082  
 Class-primary: 9  
 Packing Group: III  
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROPICONAZOLE)

**Marine Transport**

UN No: 3082  
 Class-primary 9  
 Packing Group III  
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROPICONAZOLE)

**Special Provisions:**

If the product's individual container is below 5L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

**Section 15 Regulatory Information**

EPA Approval Code: HSR000598  
 HSNO Classification: 6.1E(oral), 6.9B, 9.1A

<b>HSW (HS) Regulations 2017 and EPA Notices</b>	<b>Trigger Quantity</b>
Certified Handler	Not Required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	100L(9.1A)
Emergency Response Plan	100L(9.1A)
Secondary Containment	100L(9.1A)
<b>HSNO Additional Controls (Restrictions of use)</b>	
Restrictions of Use- 77A	<ul style="list-style-type: none"> <li>This substance must not be applied into or onto water</li> </ul>
<b>Hazardous Property Controls Notice 2017</b>	
HPC Notice Part 4 Clause 47	Equipment for class 9 substances must be appropriate
HPC Notice Part 4 Clause 48	Records of application of class 9 pesticides and plant growth regulators
HPC Notice Part 4 Subpart A	Site and storage controls for class 9 substances
HPC Notice Part 4 Subpart C	Qualifications required for application of class 9 Pesticides.
<b>ACVM Act and Regulations</b>	
Registered pursuant to the ACVM Act 1997, See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> for registration conditions	No. P007252
<b>For all further controls</b>	Refer to EPA website ( <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> ) for controls document - HSR000596

**Section 16 Other Information****Glossary**

EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
LC50	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD50	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level

## References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

## Disclaimer

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Please contact the New Zealand distributor, if further information is required.

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