

# MATERIAL SAFETY DATA SHEET

## Chipco® Signature Systemic Fungicide

Date of Issue: May 1<sup>st</sup>, 2007

### 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

**Product name:** Chipco® Signature™ Systemic Fungicide  
**Other names:** None  
**Product code:** 4207873  
**Recommended use:** For use as a fungicide in turf.  
**Supplier:** Bayer Environmental Science – A Business Group of Bayer CropScience Pty Ltd  
ABN 87 000 226 022  
**Address:** 391 - 393 Tooronga Road, East Hawthorn  
Victoria 3123, Australia  
**Telephone:** (03) 9248 6888  
**Facsimile:** (03) 9248 6800  
**Website:** [www.bayercropscience.com.au](http://www.bayercropscience.com.au)  
**Contact:** Technical Manager (03) 9248 6854  
**Emergency Telephone Number:** 1800 033 111 – Orica SH&E Shared Services

### 2. HAZARDS IDENTIFICATION

**NON-HAZARDOUS SUBSTANCE - NON-DANGEROUS GOOD**  
May irritate eyes. Not flammable.

**Hazard designation:** Hazardous (National Occupational Health and Safety Commission - NOHSC)  
**Risk phrases:** Not applicable  
**Safety phrases:** Not applicable  
**ADG classification:** Not "dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.  
**SUSDP classification:** Exempt

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:	CAS Number:	Concentration (g/kg):
Fosetyl present as the aluminium salt	[39148-24-8]	800
Precipitated silica	[112926-00-8]	<10
Other ingredients	(non hazardous)	~200

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### 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 Material Safety Data Sheet to a doctor.

- Inhalation:** If inhaled remove to fresh air and keep at rest. Obtain medical advice if symptoms persist. If not breathing give artificial respiration and get medical attention as soon as possible.
- Skin contact:** Carefully remove contaminated clothing. Wash affected areas with soap and water. Seek medical aid if symptoms persist.
- Eye contact:** Rinse eyes immediately with clean water for at least 15 minutes and obtain medical aid, preferably from an ophthalmologist.
- Ingestion:** Wash out mouth with water. Do NOT induce vomiting. Keep patient at rest and seek medical advice as above.
- First Aid Facilities:** Ensure washing facilities are available, including an eyewash station.
- Medical attention:** Fosetyl-aluminium is a phosphonate compound of low toxicity which does not inhibit cholinesterase.  
Possible symptoms:  
*Local* – irritation of eyes, skin and mucous membranes.  
*Systemic* – unknown – none reported.
- Treat symptoms. There is no specific antidote.

### 5. FIRE FIGHTING MEASURES

- Extinguishing media:** Carbon dioxide, foam, dry agent
- Hazards from combustion products:** Oxides of carbon and phosphorous when involved in fire.
- Precautions for fire fighters:** Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of extinguishing agent and spillage safely later.

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### 6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled material or contaminated surfaces. Do not smoke, eat or drink during the clean up process. Avoid breathing dust. Wear personal protective clothing and equipment as detailed in Section 8 PERSONAL PROTECTION. Keep people and animals away. Contain spillage. Avoid creating dust by damping down. Prevent spilled material from entering drains or watercourses. Shovel or sweep up, and transfer into plastic drums. Clean floor with a damp cloth and place it in the drum. Seal drums and label ready for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses etc. is unavoidable, warn the local water authority.

### 7. HANDLING AND STORAGE

**Handling:** Keep out of reach of children. Wear long sleeved overalls and gloves while handling. Avoid contact with the eyes, skin and clothing or inhalation of product.

**Storage:** Store in the closed original container in a dry, well-ventilated area, as cool as possible, out of direct sunlight.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure standards:** The NOHSC exposure standard (TWA) for precipitated silica is 10 mg/m<sup>3</sup>.  
The ACGIH TLV – TWA for Aluminium compounds, expressed as aluminium is 2 mg/m<sup>3</sup>.

**Engineering controls:** Use in a well-ventilated area only.

**Personal Protective Equipment:** Eyes: Avoid contact with eyes

Clothing: Full length work clothes

Gloves: Avoid contact with skin – wear gloves if necessary

Respiratory: Avoid inhaling dust – wear disposable dust mask if necessary

Other: Wash hands after use.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Pale green non-dusty solid granule
<b>Odour:</b>	Negligible
<b>Vapour pressure:</b>	<0.013mPa at 25 degrees Celsius
<b>Vapour density:</b>	Not available
<b>Boiling point:</b>	Decomposes above 200 degrees Celsius
<b>Freezing/melting point:</b>	Not available
<b>Solubility:</b>	120 g/L at 20 degrees Celsius
<b>Density:</b>	0.55 - 0.65 g/mL
<b>Molecular weight:</b>	354.1 (technical fosetyl-aluminium)
<b>pH:</b>	Not available
<b>Flash Point:</b>	Non flammable, non explosive
<b>Flammability (explosive) limits:</b>	Not determined
<b>Auto-ignition temperature:</b>	Not available
<b>Octanol/water partition coefficient:</b>	Not available
<b>Formulation:</b>	Water dispersible granule

### 10. STABILITY AND REACTIVITY

<b>Chemical stability:</b>	Stable under normal conditions of use.
<b>Hazardous polymerisation:</b>	No dangerous reaction known under normal conditions of use.
<b>Conditions to avoid:</b>	Extreme heat and fire and strong alkalis and acids.
<b>Incompatible materials:</b>	Strong alkalis and acids.
<b>Hazardous decomposition products:</b>	Oxides of carbon and phosphorous when involved in fire.

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### 11. TOXICOLOGICAL INFORMATION

#### POTENTIAL HEALTH EFFECTS

<b>Inhalation:</b>	Dust may cause respiratory irritation in susceptible individuals.
<b>Skin contact:</b>	Studies indicate this product is not an irritant or sensitizing agent.
<b>Eye contact:</b>	May be a slight eye irritant.
<b>Ingestion:</b>	May be harmful if swallowed.

#### ANIMAL TOXICITY DATA – PRODUCT:

##### Acute:

<b>Oral toxicity:</b>	LD <sub>50</sub> rat: 2680 mg/kg
<b>Dermal toxicity:</b>	LD <sub>50</sub> rat: 2020 mg/kg
<b>Inhalation toxicity:</b>	LC <sub>50</sub> (4 h) rat: >5.02 mg/L – 4 hour exposure to dust
<b>Skin irritation:</b>	Slightly irritating (rabbit)
<b>Eye irritation:</b>	Irritating (rabbit)
<b>Sensitisation:</b>	Non sensitising (guinea pig)

##### Chronic:

Fosetyl-aluminium is not mutagenic, not carcinogenic and not teratogenic.

### 12. ECOLOGICAL INFORMATION

Dangerous to fish. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

<b>Ecotoxicity:</b>	<u>Fosetyl-aluminium:</u> <i>Fish toxicity:</i> LC <sub>50</sub> (96 h) rainbow trout > 122 mg/L <i>Daphnia toxicity:</i> <i>Daphnia magna</i> LC <sub>50</sub> (48 h) > 100 mg/L <i>Algal toxicity:</i> IC <sub>50</sub> (72 h) algae ( <i>Desmodesmus subspicatus</i> ) > 16 mg/L <i>Bird toxicity:</i> Acute oral LD <sub>50</sub> bobwhite quail > 8000 mg/kg  <u>Aliette WG Fungicide (similar formulation):</u> <i>Fish toxicity:</i> LC <sub>50</sub> (96 h) rainbow trout > 120 mg/L <i>Daphnia toxicity:</i> <i>Daphnia magna</i> LC <sub>50</sub> (48 h) 37 mg/L <i>Algal toxicity:</i> E <sub>r</sub> C <sub>50</sub> algae ( <i>Scenedesmus subspicatus</i> ) 8 mg/L
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<b>Environmental fate, persistence and degradation:</b>	In soil, fosetyl-aluminium has an extremely short half-life under both aerobic and anaerobic conditions, with rapid dissipation and metabolism; DT <sub>50</sub> (aerobic) 20 minutes to 1.5 hours. In microbially active water / sediment systems, fosetyl-aluminium is rapidly degraded; DT <sub>50</sub> 14 – 40 hours. Aliette WG is readily biodegradable.
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### 13. DISPOSAL CONSIDERATIONS

Shake empty bag into spray tank. DO NOT dispose of undiluted chemicals on site. Puncture or shred and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm 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.

### 14. TRANSPORT INFORMATION

UN number:	Not applicable
Proper shipping name:	Not applicable
Class and Subsidiary Risk:	Not "dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
Packing Group:	Not applicable
EPG:	Not applicable
Hazchem code:	Not applicable
Marine pollutant:	No

### 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Act 1988  
Australian Pesticides and Veterinary Medicines Authority Approval Number: 50950

### 16. OTHER INFORMATION

Trademark information:	Chipco® is a Registered Trademark of Bayer
Preparation information:	Replaces October 21, 2002 edition. Reason for update: Change from Non-Hazardous to Hazardous (eye irritation), Composition, Exposure Standards, Ecological Information
Data sources:	Bayer CropScience Pty Ltd product safety data and published data

This MSDS 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 MSDS 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.

END OF MSDS