SAFETY DATA SHEET

SECTION 1  IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Apparent Procymidone 500 Fungicide

Other Names: Procymidone. A dicarboximide derivative. Group 2 Fungicide.
Use: A liquid broad spectrum agricultural fungicide.
Company: Apparent Pty Ltd
Address: Suite G.08, 762 Toorak Rd, Hawthorn East, Vic. 3123.
         PO Box 3092, Cotham PO, Kew, Vic 3101
ACN/ABN: 143 724 136
Telephone Number: 03 9822 1321
Fax Number: 03 9817 7845
Emergency Contact: 0411 227 338
Email: wwardell@bigpond.net.au

SECTION 2  HAZARDS IDENTIFICATION

Classified as hazardous according to criteria of Safe Work Australia. Not classified as a Dangerous Good according to the ADG Code.

GHS Classification:
Carcinogenicity: Category 2.

Signal Word: WARNING.

Hazard statements:
H360 May damage fertility or the unborn child.

Precautionary Statements:
Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.

Response:
P308 + P313 IF exposed or concerned: Get medical advice/attention.

Storage and Disposal
P405 Store locked up.
P501 Dispose of contents/container in accordance with national regulations.

SECTION 3  COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>CAS NUMBER</th>
<th>PROPORTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procymidone</td>
<td>32809-16-8</td>
<td>500 g/L</td>
</tr>
<tr>
<td>Other ingredients</td>
<td></td>
<td>Balance</td>
</tr>
<tr>
<td>(including water)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>determined not to be hazardous</td>
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</tbody>
</table>

Issued May 2014
**SECTION 4**

**FIRST AID MEASURES**

**FIRST AID**

**Ingestion:** If swallowed rinse mouth and give plenty of water to drink. If poisoning occurs, contact a Doctor or Poisons Information Centre at once. Phone 131 126.

**Eye contact:** Hold eyes open and flood gently with clean water until chemical is removed. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. If irritation persists, seek medical advice.

**Skin contact:** Remove contaminated clothing. Wash skin with soap and water thoroughly to remove chemical. Contact a Doctor or Poisons Information Centre at once. Phone 131 126. Launder all contaminated clothing before reuse.

**Inhalation:** If significant exposure occurs, contact a Poisons Information Centre, or call a doctor at once. Remove source of contamination or move victim to fresh air.

**Advice to Doctor:** No specific antidote. Treatment should be symptomatic and supportive.

**WARNING –** Contains procymidone which causes birth defects in laboratory animals. Women of child bearing age should avoid contact with procymidone.

**SECTION 5**

**FIRE FIGHTING MEASURES**

**Specific Hazard:** Not flammable. There is little risk of an explosion from this product if commercial quantities are involved in a fire.

**Extinguishing media:** Not combustible, use extinguishing media suited to burning material. If waterfog or fine water spray is used, ensure all runoff is contained. Contain all runoff.

**Hazards from combustion products:** Product is likely to decompose after heating to dryness and continued strong heating and will emit toxic fumes. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk to of exposure to vapour or smoke.

**Precautions for fire-fighters and special protective equipment:** Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke or vapours generated.

**SECTION 6**

**ACCIDENTIAL RELEASE MEASURES**

**Emergence procedures / Material and methods for containment and cleanup procedures:** Wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves and disposable mist mask covering mouth and nose. In the case of spillage, stop leak if safe to do so, and contain spill. Contain and absorb spilled material with absorbent material such as sand, clay, cat litter or material such as vermiculite. Vacuum, shovel or pump spilled material into an approved container and dispose of waste as indicated in section 13 or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Keep out animals and unprotected persons.

To decontaminate spill area, tools and equipment, wash with a suitable solution (ie organic solvent, detergent, bleach or caustic) and add the solution to the drums of wastes already collected. Label for contents. Dispose of drummed wastes, including decontamination solution, in accordance with the requirements of Local or State Waste Management Authorities. If a significant quantity of material enters drains, advise emergency services. Thoroughly launder protective clothing before storage or re-use.

**SECTION 7**

**HANDLING AND STORAGE**

**Precautions for Safe Handling:** WARNING – contains Procymidone, which causes birth defect in laboratory animals. Women of child bearing age should avoid contact with procymidone. Very dangerous, particularly the concentrate. Poisonous if absorbed by skin contact or inhaled or swallowed. May irritate the eyes and skin. Avoid contact with eyes and skin. DO NOT inhale spray mist. When opening the container and preparing product for use and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves and disposable mist mask covering mouth and nose. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day’s use, wash gloves and contaminated clothing.
SECTION 7  HANDLING AND STORAGE (Continued)

Conditions for Safe Storage: Store in a locked room or place away from children, animals, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight. Ideally, the product should be stored below 30°C.

SECTION 8  EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:
Exposure guidelines have not been established for this product by Safe Work Australia.

Biological Limit Values:
No biological limit allocated.

Engineering controls:
Use in ventilated areas, generally natural ventilation is adequate. Keep containers closed when not in use.

Personal Protective equipment (PPE):
General: Very dangerous, particularly the concentrate. Poisonous if absorbed by skin contact or inhaled or swallowed. May irritate the eyes and skin. Avoid contact with eyes and skin. DO NOT inhale spray mist. When opening the container and preparing product for use and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length PVC gloves and disposable mist mask covering mouth and nose. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

Personal Hygiene: Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

SECTION 9  PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White to off-white coloured viscous suspension.
Odour: Mild odour.
Boiling point: No data.
Freezing point: No data.
Specific Gravity: No data.
Solubility in Water: Suspends in water.
pH: No data.
Flammability: Not flammable.
Corrosive hazard: Not corrosive.
Flashpoint (°C): Not flammable.
Poisons Schedule: This product is a schedule 7 (S7) poison.
Formulation Type: Suspension Concentrate.

SECTION 10  STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

Conditions to avoid: Do not store for prolonged periods in direct sunlight.

Incompatible materials: Strong oxidising agents and strong alkalis.

Hazardous decomposition products: Product is likely to decompose after heating to dryness and continued strong heating and will emit toxic fumes.

Hazardous reactions: No particular reactions to avoid.

SECTION 11  TOXICOLOGICAL INFORMATION

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure.
Potential Health Effects:

ACUTE EFFECTS

Swallowed: Low acute oral toxicity. LD$_{50}$ (rat) = 6800 mg/kg.

Eye: This product may cause eye irritation. Symptoms may include stinging and reddening of eyes and watering.

Skin: Low acute dermal toxicity. LD$_{50}$ (rat) > 2500 mg/kg. May irritate the skin.

Inhaled: Unlikely to cause inhalation toxicity. May irritate mucous membranes of the nose and mouth. Acute Inhalation toxicity (rat) > 1.5 mg/L/4 hrs.

Long Term Exposure:

Chronic toxicity: WARNING – Contains procymidone which causes birth defects in laboratory animals. Women of child bearing age should avoid contact with this product.

In a long-term feeding study, a slightly increased incidence in liver tumours was reported in mice; in rats, decreased weight gain was observed at 1000 and 2000 ppm. At these doses, testicular interstitial cell and ovarian stromal hyperplasia, and an increased incidence of testicular interstitial cell tumours, were observed. In a 2-generation study in rats, infertility and abnormalities of the male sexual organs were observed in adults and in pups at the highest dose level of 750 ppm. In teratogenicity studies with rats and rabbits no embryotoxic or teratogenic effects were found. No mutagenic properties were found in various test systems (in vivo and in vitro). The effects on reproduction and the induction of testicular tumours in the long term rat study can be explained by the effects of procymidone on the endocrine system.

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicology: The active ingredient, procymidone, is moderately toxic to fish and aquatic arthropods. Fish: Rainbow trout (96 hr) LC$_{50}$ = 7.2 mg/L; Bluegill sunfish (96 hr) EC$_{50}$ = 10.3 mg/L. *Daphnia Magna* EC$_{50}$ > 4.2 mg/L. Algae: *Scenedesmus subspicatus* (96 hr) EC$_{50}$ 4.7 mg/L. Low toxicity to birds. Birds: Mallard duck NOEL = 4092 mg/kg; Bobwhite quail NOEC = 5200 mg/kg. The acute toxicity to earthworms is low. The results of the acute oral and contact tests on bees also indicate a low toxicity of procymidone.

Environmental Fate: Persists in soils for approximately 4 to 12 weeks depending on organic matter content. The log Pow of procymidone is 3.30. Bioaccumulation factor (BCF) ~ 110 to 130 thus no bioconcentration in birds and mammals is expected. In aerobic conditions, degradation of procymidone is pH dependent (faster in alkaline soils).

SECTION 13 DISPOSAL CONSIDERATIONS

Spills and Disposal: Persons involved in cleanup require adequate skin protection - see section 8. Spills and Disposal: Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with a suitable solution (ie organic solvent, detergent, bleach or caustic) and add the solution to the drums of wastes already collected. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities. In rural areas contact ChemClear http://www.chemclear.com.au for help with collection of unwanted rural chemicals.

Disposal of empty containers: Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.
SECTION 13 DISPOSAL CONSIDERATIONS (Continued)

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.

SECTION 14 TRANSPORT INFORMATION

Road & Rail Transport: This product is not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Marine and Air Transport: Apparent Procymidone 500 Fungicide is not classified as a Dangerous Good according to the International Maritime Dangerous Goods (IMDG) Code and the International Air transport Association (IATA).

SECTION 15 REGULATORY INFORMATION

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a schedule 7 poison.
This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 69208.
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 (7th Ed). This product is not classified as a Dangerous Good according to the International Maritime Dangerous Goods (IMDG) Code and the International Air transport Association (IATA).

Requirements concerning special training:
Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

SECTION 16 OTHER INFORMATION

Issue Date: 18 May 2014. Valid for 5 years. (First issue).

Key to abbreviations and acronyms used in this SDS:
ADG Code: Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).
Ataxia: Inability to control the coordinate movements of the muscles.
Bradycardia: Is a resting heart rate of under 60 beats per minute (adults).
Carcinogen: An agent which is responsible for the formation of a cancer.
Clonic: An abnormality in neuromuscular activity characterized by rapidly alternating muscular contraction and relaxation.
Genotoxic: Capable of causing damage to genetic material, such as DNA.
Mutagenic: Capable of inducing a genetic mutation in an organism.
LD_{50}: Median Lethal Dose A statistically derived single dose of a substance that can be expected to cause death in 50% of dosed animals.
OCS: Office of Chemical Safety.
Oedema: Accumulation of fluid in tissues.
PPE: Personal protective equipment.
Teratogen: An agent capable of causing abnormalities in a developing foetus.
TWA: The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.
Safe Work Australia: Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).
SECTION 16 OTHER INFORMATION (Continued)

References

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 SDS 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.

End SDS