



## MATERIAL SAFETY DATA SHEET

### TITAN IPRODIONE AQUAFLOW 500 FUNGICIDE

#### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name</b>	Titan Iprodione Aquaflow 500 Fungicide
<b>Product Code</b>	-
<b>Other Names</b>	-
<b>Product Use</b>	Agricultural Fungicide
<b>Company Name</b>	Titan Ag Pty Ltd
<b>Address</b>	15/16 Princes Street Newport NSW 2106
<b>Telephone Number</b>	02 9999 6655
<b>Emergency Telephone</b>	02 9999 6655

#### 2. HAZARDS IDENTIFICATION

##### HAZARDOUS SUBSTANCE. NON DANGEROUS GOODS.

Classified as hazardous according to the criteria of Safe Work Australia.

<b>Hazards</b>	Xn - Harmful N - Dangerous for the Environment
<b>Risk Phrases</b>	R40 - Limited evidence of a carcinogenic effect. R50/53 - Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
<b>Safety Phrases</b>	S2 - Keep out of reach of children. S36/37 - Wear suitable protective clothing and gloves. S60 - This material and its container must be disposed of as hazardous waste. S61 - Avoid release to the environment. Refer to special instructions/Material Safety Data Sheets.

#### 3. COMPOSITION / INFORMATION ON INGREDIENTS

<b>Ingredient (common name)</b>	<b>CAS Number</b>	<b>Proportion</b>
Iprodione	36734-19-7	500g/L
Ingredients deemed not to be hazardous	Proprietary	Balance

#### 4. FIRST AID MEASURES

<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist.
<b>Ingestion</b>	If swallowed, do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention if symptoms persist.



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<b>Skin</b>	If skin or hair contact occurs, immediately remove contaminated clothing and wash skin and hair thoroughly. Seek medical attention if symptoms persist.
<b>Eyes</b>	If in eyes, hold eyelids apart and flush the eye continuously with large amounts of water for at least 15 minutes. Seek medical attention if symptoms persist.

### 5. FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	For major fires call the Fire Brigade. Ensure that an escape path is available from any fire. Water spray, carbon dioxide, foam and dry chemical
<b>Hazardous Combustion Products</b>	Oxides of carbon and nitrogen and hydrogen chloride.
<b>Firefighting Equipment</b>	Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.
<b>Unusual Fire or Explosion Hazards</b>	Non flammable.
<b>Hazchem Code</b>	Not allocated.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Spills</b>	In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection. Stop leak if safe to do so and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Collect into labelled containers for recycling or salvage and dispose of promptly. .
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### 7. HANDLING AND STORAGE

<b>Handling</b>	Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Provide adequate ventilation.
<b>Storage</b>	Store in the closed, original container in a dry, well ventilated area, as cool as possible. Do not store for prolonged periods in direct sunlight. Keep container tightly sealed and do not store with seed, animal food or foodstuffs.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Exposure Standards (Safe Work Australia)</b>	No exposure standards set.
<b>Engineering Controls</b>	This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

<b>Respiratory Protection</b>	Respiratory protection not necessary. Avoid working in and breathing spray mist. If in doubt use a Safe Work Australia approved full face supplied air respirator if high airborne concentrations of the material are present. See Australian Standards AS/NZS 1715 and 1716 for more information.
<b>Eye Protection</b>	Protective glasses or goggles and face shield.
<b>Skin Protection</b>	Impervious elbow-length gloves, cotton overalls and washable hat.
<b>Hygienic Practices</b>	Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	White viscous suspension
<b>Odour</b>	Weak characteristic odour
<b>Solubility in Water</b>	Forms suspension in water
<b>Boiling Point</b>	<100°C
<b>Freezing Point</b>	No information available.
<b>Vapour Pressure</b>	No information available.
<b>Vapour Density (Air = 1)</b>	1.155g/mL @ 20°C
<b>Specific Gravity (H<sub>2</sub>O=1)</b>	No information available.
<b>pH</b>	4 – 6 (undiluted @ 23°C)
<b>Partition coefficient (octanol/water)</b>	Iprodione: Log Pow = 3.0 (pH 3 and 5)

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under normal conditions of use. May be unstable in conditions where the pH is 7 or higher.
<b>Incompatible Materials</b>	Strong acids, strong bases and strong oxidizing agents.
<b>Hazardous Decomposition Products</b>	Oxides of carbon and nitrogen and hydrogen chloride.
<b>Hazardous Polymerization Conditions to Avoid</b>	Will not occur. Excessive heat.

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicity</b>	<b>Iprodione:</b> Oral LD <sub>50</sub> ( rat ) = 3500 mg/kg Oral LD <sub>50</sub> ( mouse ) = 4000 mg/kg Oral LD <sub>50</sub> ( rabbit ) > 4000 mg/kg Dermal LD <sub>50</sub> ( rat ) ≥ 2500 mg/kg Dermal LD <sub>50</sub> ( rabbit ) = 1000 mg/kg Inhalation LC <sub>50</sub> ( rat ) > 3.3mg/L - 4 hour  <b>Reproductive Effects:</b> No evidence of reproductive effects. <b>Teratogenic Effects:</b> No evidence of teratogenic effects.
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**Mutagenic Effects:** No information available..  
**Carcinogenic Effects:** Limited evidence indicates that high level exposures to iprodione cause cancer.  
**Organ Toxicity:** Target organs identified in animal studies include the reproductive system (prostate gland and uterus), liver, and kidneys.

**Routes of Exposure**  
**Acute Health Effects**

Inhalation, ingestion, eye and skin  
 Inhalation: May irritate mucous membranes of nose and mouth.  
 Ingestion: May be harmful if a large amount is swallowed.  
 Eye: Can cause slight eye irritation.  
 Skin: Can cause mild skin irritation.

**Chronic Health Effects**  
**Existing Conditions**  
**Aggravated by Exposure**  
**Carcinogenicity**

No information available.  
 No information available.  
 Iprodione is classified by Safe Work Australia as a Class 3 carcinogen, possibly carcinogenic to humans.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Aquatic Organisms:**  
 Iprodione is moderately toxic to fish species.  
 LC<sub>50</sub> (Rainbow trout) = 6.7 mg/L  
 LC<sub>50</sub> (Sunfish) = 2.25 mg/L

**Birds:**  
 LD<sub>50</sub> (Bobwhite quail) = 930 mg/kg  
 Iprodione is nontoxic to bees.

**Mobility**

This product is biodegradable. It will not accumulate in the soil or water or cause long term problems.

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods and containers**

Instructions concerning the disposal of this product and its containers are given on the product label.  
 Dispose according to applicable local and state government regulations.

**Special precautions for landfill or incineration**

Please consult your state Land Waste Management Authority for more information

## 14. TRANSPORT INFORMATION

Not classified as a dangerous good according to the Australian Code for the Transport of Dangerous goods by road or rail.

**UN Number** Not applicable  
**Proper Shipping Name** Not applicable  
**Dangerous Goods Class** Not applicable  
**Hazchem Code** Not applicable



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<b>Packing Group</b>	Not applicable
<b>Special Precautions</b>	Not applicable
Sea Transport:	
<b>UN Number</b>	3082
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains iprodione)
<b>Dangerous Goods Class</b>	9
<b>Hazchem Code</b>	2X
<b>Packing Group</b>	III
<b>Special Precautions</b>	Not applicable

### 15. REGULATORY INFORMATION

Iprodione is listed in the Australian Inventory of Chemical Substances (AICS).

### 16. OTHER INFORMATION

<b>Last Revision of MSDS</b>	Rev 1.0 (31/08/2010)
<b>Prepared by</b>	MSDS.COM.AU Pty Ltd <a href="http://www.msds.com.au">www.msds.com.au</a>
<b>Abbreviations Used</b>	IARC: International Agency for Research on Cancer NTP: National Toxicology Program (U.S.) OSHA: Occupational Safety and Health Administration (U.S.) STEL: Short term exposure limit TWA: Time weighted average

#### Emergency Contacts

<b>Titan Ag Pty Ltd</b>	<b>02 9999 6655</b>
<b>Titan Ag Pty Ltd – Emergency Number</b>	<b>02 9999 6655</b>
<b>Police and Fire Brigade</b>	<b>000</b>
<b>Poisons Information Centre</b>	<b>13 11 26</b>

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Please read instructions / label before using product.