



MATERIAL SAFETY DATA SHEET

TITAN IPRODIONE 250 FUNGICIDE

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	Titan Iprodione 250 Fungicide
Product Code	-
Other Names	-
Product Use	Agricultural Fungicide
Company Name	Titan Ag Pty Ltd
Address	3/14 Narabang Way Belrose NSW 2085
Telephone Number	02 9986 2943
Emergency Telephone	02 9986 2943

2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE. NON DANGEROUS GOODS.

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

Hazards	Xn - Harmful N - Dangerous for the Environment
Risk Phrases	R40 - Limited evidence of a carcinogenic effect. R50/53 - Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
Safety Phrases	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

Ingredient (common name)	CAS Number	Proportion
Iprodione	36734-19-7	250g/L
Hydrocarbon liquid	64742-56-9	332g/L
Ingredients deemed not to be hazardous	Proprietary	Balance

4. FIRST AID MEASURES

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

Skin	symptoms persist. If skin or hair contact occurs, immediately remove contaminated clothing and wash skin and hair thoroughly. Seek medical attention if symptoms persist.
Eyes	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.
Note to Doctor	As this product contains a hydrocarbon liquid, care should be taken to prevent pulmonary aspiration. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	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
Hazardous Combustion Products	Oxides of carbon and nitrogen and hydrogen chloride.
Firefighting Equipment	Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.
Unusual Fire or Explosion Hazards	Non flammable.
Hazchem Code	In case of fire spray unopened containers with water to keep cool. Not allocated.

6. ACCIDENTAL RELEASE MEASURES

Spills	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

Handling	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.
Storage	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

Exposure Standards (Safe Work Australia)	No exposure standards set.
Engineering Controls	This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.
Respiratory Protection	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.
Eye Protection	Protective glasses or goggles and face shield.
Skin Protection	Impervious elbow-length gloves, cotton overalls and washable hat.
Hygienic Practices	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

Appearance	White viscous suspension
Odour	Weak characteristic odour
Solubility in Water	Forms suspension in water
Boiling Point	<100°C
Freezing Point	No information available.
Vapour Pressure	No information available.
Vapour Density (Air = 1)	1.018g/mL @ 20°C
Specific Gravity (H₂O=1)	No information available.
pH	2 - 4
Flash Point	Not flammable
Auto-ignition Temperature	430°C
Partition coefficient (octanol/water)	Iprodione: Log Pow = 3.0 (pH 3 and 5)

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Toxicity	Iprodione: Oral LD ₅₀ (rat) = 3500 mg/kg
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Oral LD₅₀ (mouse) = 4000 mg/kg
 Oral LD₅₀ (rabbit) > 4000 mg/kg
 Dermal LD₅₀ (rat) ≥ 2500 mg/kg
 Dermal LD₅₀ (rabbit) = 1000 mg/kg
 Inhalation LC₅₀ (rat) > 3.3mg/L - 4 hour

Reproductive Effects: No evidence of reproductive effects.
Teratogenic Effects: No evidence of teratogenic effects.
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.
 Symptoms include nausea, vomiting, diarrhoea, abdominal pain, and loss of co-ordination. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

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

Eye: Can cause slight eye irritation.
 Skin: Can cause mild skin irritation.
 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.
 LC₅₀ (Rainbow trout) = 6.7 mg/L
 LC₅₀ (Sunfish) = 2.25 mg/L
Birds:
 LD₅₀ (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

Please consult your state Land Waste Management Authority for



MATERIAL SAFETY DATA SHEET

landfill or incineration 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
Packing Group	Not applicable
Special Precautions	Not applicable

Sea Transport:

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

15. REGULATORY INFORMATION

Iprodione and hydrocarbon liquid are listed in the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Last Revision of MSDS	Rev 1.0 (31/08/2010)
Prepared by	MSDS.COM.AU Pty Ltd www.msds.com.au
Abbreviations Used	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

Titan Ag Pty Ltd	02 9986 2943
Titan Ag Pty Ltd – Emergency Number	02 9986 2943
Police and Fire Brigade	000
Poisons Information Centre	13 11 26



MATERIAL SAFETY DATA SHEET

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Please read instructions / label before using product.