

MATERIAL SAFETY DATA SHEET



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STATEMENT OF HAZARDOUS NATURE

Hazardous according to criteria of National Occupational Health and Safety Commission.
R40 - Possible risk of irreversible effects.

COMPANY DETAILS:

Company: Bayer CropScience Pty Ltd ABN 87 000 226 022
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Victoria 3123 Australia
Telephone/Facsimile: (03) 9248 6888/(03) 9248 6800
Website Address: www.bayercropscience.com.au
Emergency Telephone Number: 1800 033 111 – Orica SH&E Shared Services

IDENTIFICATION

Product Name: **Rovral® Liquid Seed Dressing Fungicide**
Other Names: None
Manufacturer's Product Code: Not available
SAP Product Code: 17155 (5 L), 17157 (20 L)
UN Number: Not applicable
Dangerous Goods Class and Subsidiary Risk: Not classified as dangerous goods for transport by road or rail
Hazchem Code: Not applicable
Proper Shipping Name: Not applicable
Packing Group: Not applicable
EPG: Not applicable
Chemical Family: Dicarboximide
Poisons Schedule Number: 5
Use: Agricultural fungicide for seed treatment.

Physical Description/Properties

Appearance: Dark blue, viscous suspension with negligible odour
Boiling Point/Melting Point: Greater than 100° C (boiling point)
Vapour Pressure: Not available
Density: 1.037 g/mL at 20° C
Flashpoint: Non flammable
Flammability Limits: Not determined
Solubility in Water: Miscible with water

Other Properties:

pH: 2.0 to 4.0
Formulation: Flowable concentrate for seed treatment

Ingredients:

Chemical Name:	CAS Number:	Proportion (g/L):
Iprodione	[36734-19-7]	250
Hydrocarbon liquid	[64742-56-9]	316
Other ingredients, including water	(non hazardous)	471

ROVRAL LIQUID SEED DRESSING FUNGICIDE

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HEALTH HAZARD INFORMATION

Health Effects:

Acute:

Swallowed: Product toxicity is low but may be harmful if a large amount is swallowed. Possible symptoms include nausea, vomiting, 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.

Eye: May be an eye irritant.

Skin: The dermal toxicity of this product is low. However, skin contact should be avoided.

Inhaled: May irritate mucous membranes of nose and mouth.

Chronic: Lifetime feeding studies in rodents have shown an increased incidence of tumors in animals treated at the maximum tolerated dose. Iprodione has been classified as a Category 3 carcinogen according to the EU classification. The no observable effect level listed by the Therapeutic Goods Administration for iprodione is 4 mg/kg bw/day. Iprodione was not mutagenic in the Ames assay.

First Aid

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.

Swallowed: Wash out mouth with water. Do not induce vomiting. Give a glass of water. Keep patient at rest and seek medical advice as above.

Eye: Rinse immediately with clean water for at least 15 minutes and obtain medical aid.

Skin: Carefully remove contaminated clothing. Wash affected area with soap and water. Seek medical aid if at all worried.

Inhaled: If inhaled, remove to fresh air and keep at rest. Obtain medical advice if at all worried.

First Aid Facilities: Ensure washing facilities are available.

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HEALTH HAZARD INFORMATION - continued

Advice to Doctor: *Local contamination:*
Treatment should be symptomatic after decontamination. In case of skin or eye contamination, treat as above under First Aid.
Systemic poisoning:
Initial treatment should be symptomatic and supportive.
Anticonvulsant therapy is not appropriate.
There is no specific antidote.
As this product contains a hydrocarbon solvent, care should be taken to prevent pulmonary aspiration.

PRECAUTIONS FOR USE

Exposure Standards: The Exposure Standard set by the National Occupational Health and Safety Commission for the hydrocarbon solvent (oil mists) is - TWA (8 hour) 5 mg/m³. The occupational exposure limit for iprodione set by Bayer CropScience is 2 mg/m³.
Definition: TWA (Time Weighted Average) – Average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

Engineering Controls: Control process conditions to avoid contact. Use local exhaust ventilation during manufacture. Use in a well-ventilated area only.

Personal Protection: To avoid eye and skin contact, wearing the following personal protective clothing and equipment is recommended:
Eyes: Safety goggles or face shield
Clothing: Cotton overalls buttoned to the neck and wrist and a washable hat
Gloves: Elbow-length PVC gloves
Respiratory: Respiratory protection is not normally required. If airborne concentrations are likely to exceed the exposure standards above, an AS/NZS 1715/1716 approved respirator should be worn. Workers exposed to grain dust should wear a disposable dust mask.
Other: 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, goggles or face shield and contaminated clothing.

Flammability: Non flammable. Class C2 combustible liquid.

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SAFE HANDLING INFORMATION

Storage and

Transport:

Corrosivity Hazards: None known

Handling & Storage Precautions:

Keep out of reach of children. Avoid contact with eyes and skin, and avoid inhalation of vapour or dust from treated seed. If product on skin, immediately wash area with soap and water. Store in the closed, original container in a cool, secure well-ventilated area. Do not store for prolonged periods in direct sunlight. Protect from frost. Store treated seed in clearly marked bags or silos, away from other grain, animal feed or foodstuffs, in a cool, dry storage area. Bags which have held treated seed should not be used for any other purpose.

Transport:

Not classified as a dangerous good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Spills and Disposal:

Spillage or Leak Procedures:

Shut off or remove any sources of ignition. Avoid contact with spilled material or contaminated surfaces. Do not smoke, eat or drink during the clean up process. Wear personal protective clothing and equipment as detailed in 'Personal Protection' section above. Prevent spilled material from entering drains or watercourses. Contain spill and absorb with absorbent material such as earth, sand or clay. Transfer collected material to drums. Seal and label them for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses etc. is unavoidable, warn the local water authority.

Waste Disposal Methods:

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury empty containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Empty containers and product should not be burnt. Returnable containers should be taken back to point of supply for refill or storage. Dispose of waste product through a reputable waste contractor.

Fire/Explosion Hazard:

Extinguishing Media: Waterspray, carbon dioxide, foam, dry agent

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SAFE HANDLING INFORMATION – continued

Special Fire Fighting Procedures: Firefighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). If possible and without risk, remove intact containers from exposure to fire. Otherwise, spray unopened containers with water to keep cool. Contain fire-fighting water by bunding area with sand or earth to prevent it entering any bodies of water. Dispose of fire control extinguishing agent and spillage later in a safe manner.

Reactivity Hazards: Stable under normal conditions of user. Avoid extreme heat, strong acids, bases, and strong oxidising agents. Incompatible with strong alkalis. Toxic compounds of carbon, nitrogen and chlorine may be given off when exposed to extreme heat or fire.

OTHER INFORMATION:

Toxicology (technical iprodione):	Oral LD ₅₀ (mg/kg)	3500	Species	Rat
	Dermal LD ₅₀ (mg/kg)	> 1000	Species:	Rabbit
	Eye irritation	Slightly irritating	Species:	Rabbit
	Skin irritation	Non irritating	Species:	Rabbit
	Sensitisation	Non sensitising	Species:	Guinea pig

Environmental / Ecological Effects (technical iprodione): Very toxic to aquatic organisms. Low hazard to earthworms, bees and other beneficial insects.

Fish toxicity:

LC₅₀ (96 hr) for rainbow trout 4.1 mg/L

LC₅₀ (96 hr) for bluegill sunfish 3.7 mg/L

EC₅₀ (48 hr) for Daphnia 0.25 mg/L

Bird toxicity:

Acute oral LD₅₀ for bobwhite quail > 2,000 mg/kg

Acute oral LD₅₀ for mallard ducks 10,400 mg/kg

Algal toxicity:

IC₅₀ (72 hr) for Algae 15.3 mg/L

Iprodione is rapidly metabolised in soil.

DO NOT contaminate streams, rivers or waterways with the chemical, used containers or bags which have held treated seed. DO NOT feed treated seed or otherwise expose wildlife or domestic birds.

Special Precautions / Comments: Note L in the List of Hazardous Substances (NOHSC) applies. The hydrocarbon solvent contains less than 3% DMSO extract and therefore the R45 classification is not applicable.

Data Sources / References: Bayer CropScience Pty Ltd product safety data and published data

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CONTACT POINT:

Emergency Contact Number: 1800 033 111 (Orica SH&E Shared Services)
Development Manager: (03) 9248 6888

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.

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