

Material Safety Data Sheet

Iprodione WP 50D

SDS #: 7074-A
Revision Date: 2012-08-20
Version 2.05



This MSDS has been prepared to meet U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Workplace Hazardous Materials Information System (WHMIS) requirements.

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Iprodione WP 50D
Formula code	7074-A
Active Ingredient(s)	Iprodione
Alternate Commercial Name	Rovral® Wettable Powder; Rovral PH
Synonyms	3-(3,5-dichlorophenyl)-N-isopropyl-2,4 dioximidazolidine-1-carboxamide; 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide
Chemical Family	Dicarboximide
Recommended use	Fungicide
<u>Manufacturer</u>	<u>Emergency telephone number</u>
FMC Corporation Agricultural Products Group 1735 Market Street Philadelphia, PA 19103 General Information: Phone: (215) 299-6000 E-Mail: msdsinfo@fmc.com	For leak, fire, spill or accident emergencies, call: +1 800 / 424 9300 (CHEMTREC - U.S.A.) +1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries) Medical Emergencies: (800) 331-3148 (U.S.A. & Canada) +1 (651) 632-6793 (All Other Countries - Collect)

2. Hazards identification

<u>Appearance</u>	powder
<u>Physical state</u>	solid
<u>Odor</u>	No off odor
Flammable properties	Finely dispersed particles can form explosive mixtures in air.
<u>Potential health effects</u>	
<u>Acute effects</u>	
Eyes	May cause slight irritation.
Skin	Substance may cause slight skin irritation.
Inhalation	May cause irritation of respiratory tract.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic effects	Prolonged exposure may cause chronic effects. Possible risks of irreversible effects. See Section 11 for additional Toxicological Information.

3. Composition/information on ingredients

Hazardous ingredients

Chemical Name	CAS-No	Weight %
Iprodione	36734-19-7	50
Lignin, alkali, reaction products with Disodium sulfite and Formaldehyde	105859-97-0	1-5
Sodium Lauryl Sulfate	151-21-3	1-5

4. First aid measures

Eye contact	Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.
Skin contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not induce vomiting or give anything by mouth to an unconscious person.

5. Fire-fighting measures

<u>Flammable properties</u>	Finely dispersed particles can form explosive mixtures in air.
Sensitivity to Mechanical Impact	not applicable
Sensitivity to Static Discharge	not applicable
Suitable extinguishing media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.
Specific hazards arising from the chemical	Thermal decomposition can lead to release of irritating and toxic gases and vapors.
Protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective suit.

NFPA

Health Hazard	1
Flammability	1
Stability	0
Special Hazards	-

6. Accidental release measures

Personal precautions	Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.
Environmental precautions	Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.
Methods for containment	Use a wet sweeping compound or water to prevent dust formation.

Methods for cleaning up	Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.
Other	For further clean-up instructions call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

7. Handling and storage

Handling	Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.
Storage	Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Store in original container.

8. Exposure controls/personal protection

<u>Exposure guidelines</u>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<u>Occupational exposure controls</u>	
Engineering measures	Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.
<u>Personal Protective Equipment</u>	
General Information	If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.
Respiratory protection	For dust, splash, mist or spray exposures wear a filtering mask.
Eye/face protection	For dust, splash, mist or spray exposure, wear chemical protective goggles or a face-shield.
Skin and body protection	Wear long-sleeved shirt, long pants, socks, shoes, and gloves.
Hand protection	Protective gloves
Hygiene measures	Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

9. Physical and chemical properties

Appearance	powder
Color	light brown
Physical state	solid
Odor	No off odor
pH	No information available.
Melting Point/Range	No information available.
Freezing point	No information available
Boiling Point/Range	not applicable
Flash Point	not applicable
Evaporation rate	not applicable

Autoignition Temperature	not applicable
Flammable properties	Finely dispersed particles can form explosive mixtures in air.
Vapor pressure	No information available
Vapor density	No information available
Bulk density	14 - 23 kg/m ³
Molecular Weight	No information available
Water solubility	Slightly soluble
Percent volatile	No information available
Partition coefficient:	not applicable
Viscosity	No information available
Oxidizing properties	not applicable

10. Stability and reactivity

Stability	Stable.
Conditions to avoid	Excessive heat
Materials to avoid	Strong acids. Strong bases. Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides, nitrogen oxides (NO _x), Sulfur oxides, Hydrogen chloride, Hydrogen fluoride.
Hazardous polymerization	Hazardous polymerization does not occur.

11. Toxicological information

Eye contact	Slightly or non-irritating (rabbit).
Skin contact	Slightly or non-irritating (rabbit).
LD50 Dermal	> 2,000 mg/kg (rat)
LD50 Oral	> 2,000 mg/kg (rat)
LC50 Inhalation:	> 5 mg/L 4 hr (rat)
Sensitization	Non-sensitizer
<u>Chronic Toxicity - Other Ingredient(s)</u>	
Chronic Toxicity	Prolonged exposure may cause chronic effects. Possible risks of irreversible effects. See Section 11 for additional Toxicological Information.
Carcinogenicity	Iprodione: Animal experiments showed a statistically significant number of benign tumors (testicular, liver, and ovarian).
Mutagenicity	Iprodione: Not mutagenic.
Reproductive toxicity	Iprodione: No toxicity to reproduction.
Neurological Effects	Iprodione: Not neurotoxic.
Developmental Toxicity	Iprodione: Caused minor delays or variations in fetal development at doses that were maternally toxic.
Target Organ Effects	Iprodione caused effects in the liver, adrenal, ovary and/or testes in chronic feeding studies in rats and dogs [NOEL: 2-year Study (rats): 150 mg/kg diet; 1-year Study (dogs): 18 mg/kg].

12. Ecological information**Ecotoxicity**

Active Ingredient(s)				
Iprodione (36734-19-7)				
Active Ingredient(s)	Duration	Species	Value	Units
Iprodione	48 h EC50	Daphnia magna	0.7	mg/L
	72 h EC50	Algae (selenastrum)	3.12	mg/L
	96 h LC50	Rainbow trout	4.1	mg/L

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Iprodione	1.9 mg/L EC50 120 h (Pseudokirchneriella subcapitata)	LC50= 4.1 mg/L Oncorhynchus mykiss 96 h		EC50 = 0.25 mg/L 48 h EC50 0.34 - 0.39 mg/L 48 h EC50 0.31 - 0.61 mg/L 48 h
Sodium Lauryl Sulfate	53 mg/L EC50 72 h (Desmodesmus subspicatus) 30 - 100 mg/L EC50 96 h (Desmodesmus subspicatus) 117 mg/L EC50 96 h (Pseudokirchneriella subcapitata) 3.59 - 15.6 mg/L EC50 96 h (Pseudokirchneriella subcapitata)	LC50 8-12.5 mg/L Pimephales promelas 96 h LC50 15-18.9 mg/L Pimephales promelas 96 h LC50 22.1-22.8 mg/L Pimephales promelas 96 h LC50 4.3-8.5 mg/L Oncorhynchus mykiss 96 h LC50 4.62 mg/L Oncorhynchus mykiss 96 h LC50 4.2 mg/L Oncorhynchus mykiss 96 h LC50 7.97 mg/L Brachydanio rerio 96 h LC50 9.9-20.1 mg/L Brachydanio rerio 96 h LC50 4.06-5.75 mg/L Lepomis macrochirus 96 h LC50 4.2-4.8 mg/L Lepomis macrochirus 96 h LC50 4.5 mg/L Lepomis macrochirus 96 h LC50 5.8-7.5 mg/L Pimephales promelas 96 h LC50 10.2-22.5 mg/L Pimephales promelas 96 h LC50 6.2-9.6 mg/L Pimephales promelas 96 h LC50 13.5-18.3 mg/L Poecilia reticulata 96 h LC50 10.8-16.6 mg/L Poecilia reticulata 96 h LC50 1.31 mg/L Cyprinus carpio 96 h		EC50 1.8 mg/L 48 h

Environmental Fate

Active Ingredient(s)		
Iprodione (36734-19-7)		
Active Ingredient(s)	Type of Test	Result
Iprodione	log Pow	3.0
	Mobility in soil	Limited mobility in soil due to its strong affinity for adsorption to organic matter.

Chemical Name	log Pow
Iprodione	3
Sodium Lauryl Sulfate	1.6

13. Disposal considerations**Waste disposal methods**

Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance.

Contaminated packaging Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions.

14. Transport information

DOT This material is not a hazardous material as defined by U.S. Department of Transportation at 49 CFR Parts 100 through 185.

Packaging Type Bulk, Non-Bulk
Description UN3077 Matière dangereuse du point de vue de l'environnement, solide, n.s.a. (Iprodione), 9, PG III Polluant Marine

TDG Classification below is only applicable when shipped by vessel and is not applicable when shipped by road or rail only.

Hazard Class 9
UN/ID No UN3077
Packing group III
Marine pollutant Iprodione.
Description UN3077 Matière dangereuse du point de vue de l'environnement, solide, n.s.a. (Iprodione), 9, PG III Polluant Marine

ICAO/IATA

UN/ID No UN3077
Hazard Class 9
Packing group III
Marine pollutant Iprodione
Description UN3077 Matière dangereuse du point de vue de l'environnement, solide, n.s.a. (Iprodione), 9, PG III Polluant Marine

IMDG/IMO

Hazard Class 9
UN/ID No UN3077
Packing group III
EmS No. F-A, S-F
Marine pollutant Iprodione
Description UN3077 Matière dangereuse du point de vue de l'environnement, solide, n.s.a. (Iprodione), 9, PG III Polluant Marine

15. Regulatory information

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	no
Chronic Health Hazard	yes
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

International Regulations

Mexico - Grade

Slight risk, Grade 1

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

D2A Very toxic materials



16. Other information

Revision Date: 2012-08-20
Reason for revision: No information available.

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