SAFETY DATA SHEET **ROVRAL® RX FUNGICIDE**

SDS #: 7071-1-A **Revision date: 2016-05-26**

Format: NA Version 1.02



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name ROVRAL® RX FUNGICIDE

Other means of identification

Product Code(s) 7071-1-A

Synonyms IPRODIONE: 3-(3,5-dichlorophenyl)-N-isopropyl-2,4 dioxoimidazolidine-1-carboxamide

(IUPAC name);

3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide (CAS

name)

Active Ingredient(s) **Iprodione**

Chemical Family Dicarboximide

PCP# 24378

Recommended use of the chemical and restrictions on use

Recommended Use: **Fungicide**

Restrictions on Use: Use as recommended by the label

Manufacturer Address

FMC Corporation 2929 Walnut Street Philadelphia, PA 19104

(215) 299-6000 (General Information)

msdsinfo@fmc.com (E-Mail General Information)

Distributor

Monsanto Canada Inc. 900 - One Research Road

Winnipeg, MB

R3T 6E3

Emergency telephone number

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:

1 800 / 331-3148 (PROSAR - U.S.A. & Canada)

1 651 / 632-6793 (PROSAR - All Other Countries - Collect)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Carcinogenicity	Category 2
Reproductive toxicity	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 4

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Danger

Hazard Statements

H304 - May be fatal if swallowed and enters airways

H313 - May be harmful in contact with skin

H331 - Toxic if inhaled

H351 - Suspected of causing cancer

H361 - Suspected of damaging fertility or the unborn child

Combustible liquid



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

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P271 - Use only outdoors or in a well-ventilated area

P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking

P235 - Keep cool

Precautionary Statements - Response

P308 + P313 - If exposed or concerned: Get medical advice/attention

P321 - Specific treatment (see .? on this label)

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P311 - Call a POISON CENTER or doctor

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P331 - Do NOT induce vomiting

P370 + P378 - In case of fire: Use Water spray. Carbon dioxide (CO 2). Foam. Dry chemical for extinction

Precautionary Statements - Storage

P405 - Store locked up

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

P501 - Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

Toxic to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

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Dicarboximide. **Chemical Family**

Chemical name	CAS-No	Weight %
Iprodione	36734-19-7	23.3
Petroleum distillates, solvent dewaxed light paraffinic	64742-56-9	20-30
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	5-10
Propylene glycol	57-55-6	1-5

Synonyms are provided in Section 1.

4	FIR:	ST A	7ID I	MFΔ	SU	RES

Eye Contact Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact

lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control

center or doctor for further treatment advice.

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 **Skin Contact**

minutes. Call a poison control center or doctor for further treatment advice.

Inhalation Move to fresh air. If person is not breathing, contact emergency medical services, then give

artificial respiration, preferably 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 Never give anything by mouth to an unconscious person

Thermal decomposition can lead to release of irritating and toxic gases and vapors

Most important symptoms and effects, both acute and delayed

None known.

Indication of immediate medical attention and special treatment

needed, if necessary

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

Specific Hazards Arising from the Chemical

Explosion data

Sensitivity to Mechanical Impact Sensitivity to Static Discharge

Not sensitive.

Yes.

Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit.

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.

Other For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1

"Product and Company Identification" above.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods for Containment Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and

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transfer to containers for later disposal.

Methods for cleaning up

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.

7. HANDLING AND STORAGE

Handle in accordance with good industrial hygiene and safety practice. 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.

Incompatible products Strong acids, Strong bases, Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Propylene glycol (57-55-6)	-	-	TWA: 10 mg/m³ aerosol only	-
			TWA: 50 ppm aerosol and vapor	
			TWA: 155 mg/m³ aerosol and vapor	

Appropriate engineering controls

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.

Individual protection measures, such as personal protective equipment

Eye/Face Protection For dust, splash, mist or spray exposure, wear chemical protective goggles.

Skin and Body Protection Wear long-sleeved shirt, long pants, socks, and shoes.

Hand Protection Protective gloves

Respiratory Protection For dust, splash, mist or spray exposures wear a filtering mask.

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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance White Suspension

Physical State Liquid

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Color White Odor None

Odor threshold No information available

pH 4.0 - 7.5

Melting point/freezing point Not applicable
Boiling Point/Range >100 °C

Flash point > 88 °C / > 190.4 °F
Evaporation Rate No information available
Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit: No information available No information available Lower flammability limit: Vapor pressure No information available Vapor density No information available **Density** 1.03 g/cm3 @ 20°C Specific gravity No information available Water solubility Miscible with water Solubility in other solvents No information available Partition coefficient No information available

Autoignition temperature 430 °C

Decomposition temperature
Viscosity, kinematic
Viscosity, dynamic
Explosive properties
Oxidizing properties
Molecular weight
Bulk density

No information available

10. STABILITY AND REACTIVITY

Reactivity Not applicable

Chemical Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid None known

Incompatible materials Strong acids, Strong bases, Strong oxidizing agents.

Hazardous Decomposition Products Nitrogen oxides (NOx). Sulfur oxides. Hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral > 5000 mg/kg (male rat) **LD50 Dermal** > 2,000 mg/kg (rat)

LC50 Inhalation > 0.8 mg/L 4 hr (rat) Estimated (>3.2 mg/L 1 hr (rat))

Serious eye damage/eye irritation Skin corrosion/irritation Slightly or non-irritating (rabbit). Slightly or non-irritating (rabbit).

Sensitization Non-sensitizer

Information on toxicological effects

Symptoms None known.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

doses in animal studies.

Mutagenicity Iprodione

Not genotoxic in laboratory studies

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Carcinogenicity Iprodione: Animal studies showed significant increased incidences of liver tunors in mice

and Leydig cell tumor not relevant to humans. Ovarian tumors in rats are within historical controls. The petroleum distillates present in this product are highly refined and should not

be considered carcinogenic.

Neurological effects Iprodione Not neurotoxic.

Reproductive toxicity Iprodione: No toxicity to reproduction in animal studies. Delayed sexual maturation in

males observed at maternally toxic doses.

maternally toxic.

STOT - single exposure Not classified. STOT - repeated exposure Not classified.

Target organ effectsLiver, Testes, Adrenal glandsNeurological effectsIprodione Not neurotoxic.Aspiration hazardNo information available.

Chemical name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, solvent dewaxed light paraffinic 64742-56-9	A2	Group 1	Known	
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	A2	Group 1	Known	

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

12. ECOLOGICAL INFORMATION

Ecotoxicity

orodione (36734-19-7)				
Active Ingredient(s)	Duration	Species	Value	Units
Iprodione	48 h EC50	Crustacea	0.7	mg/L
	72 h EC50	Algae	1.8	mg/L
	96 h LC50	Fish	3.7	mg/L
	21 d NOEC	Fish	0.26	mg/L
	21 d NOEC	Crustacea	0.17	mg/L
	96 h NOEC	Algae	3.2	ma/L

Bioaccumulation Iprodione: The substance does not have a potential for bioconcentration.

Mobility Iprodione: Medium mobility; has some potential to reach groundwater.

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

DOTThis material is not a hazardous material as defined by U.S. Department of Transportation

at 49 CFR Parts 100 through 185.

TDG Classification below is only applicable when shipped by vessel and is not applicable when

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shipped by road or rail only.

UN/ID no UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Iprodione)

Hazard class 9
Packing Group III

Marine Pollutant Iprodione.

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Iprodione), 9, PGIII, Marine

Pollutant

ICAO/IATA

UN/ID no UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Iprodione)

Hazard class 9
Packing Group III

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Iprodione), 9, PGIII

IMDG/IMO

UN/ID no UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Iprodione)

Hazard class 9
Packing Group III
EmS No. F-A, S-F
Marine Pollutant Iprodione

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Iprodione), 9, PGIII, Marine

Pollutant

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 hazardNoChronic health hazardYesFire hazardNoSudden release of pressure hazardNoReactive HazardNo

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

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

FIFRA Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION

Harmful if swallowed, inhaled or absorbed through skin.

This pesticide is toxic to aquatic invertebrates.

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US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Prop. 65	
Iprodione - 36734-19-7	Carcinogen	

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Petroleum distillates, solvent dewaxed light paraffinic 64742-56-9		X	
Propylene glycol 57-55-6	X		Х

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINC S (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Iprodione 36734-19-7			X		Х	X		X
Petroleum distillates, solvent dewaxed light paraffinic 64742-56-9	Х	Х	Х		Х	Х	Х	Χ
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	Х	Х	X		Х	Х	Х	Х
Propylene glycol 57-55-6	Х	Х	X	Х	Х	Х	Х	Х

Mexico - Grade Slight risk, Grade 1

WHMIS Hazard Class D2A - Very toxic materials



16. OTHER INFORMATION				

NFPA	Health Hazards 3	Flammability 2	Instability 0	Special Hazards -
HMIS	Health Hazards 2*	Flammability 2	Physical hazard 0	Personal Protection X

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End of Safety Data Sheet