

SAFETY DATA SHEET
Rovral Flo Fungicide

SDS # : 7071-A
Revision date: 2016-05-26
Format: NA
Version 1.02



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Rovral Flo Fungicide

Other means of identification

Product Code(s) 7071-A

Synonyms IPRDIONE: 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 # 29315

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)

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


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

<p>Danger</p> <p>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</p> 
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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

Chemical Family Dicarboximide.

Chemical name	CAS-No	Weight %
Iprodione	36734-19-7	23.3
Petroleum distillates, solvent dewaxed light	64742-56-9	20-30

paraffinic		
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. FIRST AID MEASURES

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.
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 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.
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 (CO ₂). Foam. Dry chemical.
Specific Hazards Arising from the Chemical	Thermal decomposition can lead to release of irritating and toxic gases and vapors.
Explosion data	
Sensitivity to Mechanical Impact	Not sensitive.
Sensitivity to Static Discharge	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 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

Handling	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/m ³ aerosol only TWA: 50 ppm aerosol and vapor TWA: 155 mg/m ³ 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
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
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Density	1.03 g/cm ³ @ 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	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Molecular weight	No information available
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	Slightly or non-irritating (rabbit).
Skin corrosion/irritation	Slightly or non-irritating (rabbit).
Sensitization	Non-sensitizer

Information on toxicological effects

Symptoms	None known.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity	Iprodione: Prolonged exposure caused liver, adrenal and reproductive organ toxicity at high doses in animal studies.
Mutagenicity	Iprodione Not genotoxic in laboratory studies
Carcinogenicity	Iprodione: Animal studies showed significant increased incidences of liver tumors 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

Developmental toxicity males observed at maternally toxic doses.
 Iprodione: Caused minor delays or variations in fetal development at doses that were maternally toxic.

STOT - single exposure Not classified.

STOT - repeated exposure Not classified.

Target organ effects Liver, Testes, Adrenal glands

Neurological effects Iprodione Not neurotoxic.

Aspiration hazard No 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

Iprodione (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	mg/L

Persistence and degradability Iprodione: Moderately persistent. Readily hydrolyzed.

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

DOT This 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 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.

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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 hazard	No
Chronic health hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

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.*

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

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of the products or reliance on such information.

Prepared By:

FMC Corporation

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End of Safety Data Sheet