



SAFETY DATA SHEET

Rovral 250FS

SDS # : 7078-A
Revision date: 2021-10-26
Format: AP
Version 2

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name Rovral 250FS

Product Code(s) 7078-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) Xanthan Gum

Active Ingredient(s) Iprodione

Chemical Family Dicarboximide

Recommended Use: Fungicide

Restrictions on Use: See section 16 for more information.

Manufacturer/Supplier
FMC Corporation
Agricultural Solutions
2929 Walnut Street
Philadelphia, PA 19104
General Information:
Phone: (215) 299-6000
E-Mail: sdsinfo@fmc.com

Emergency telephone
Medical Emergencies: 0800 140 1447
For leak, fire, spill or accidents: 001-803-017-9114 (CHEMTREC Indonesia)
1 703 741-5970 (CHEMTREC – International)

Section 2: HAZARDS IDENTIFICATION

GHS Classification

Aspiration toxicity	Category 1
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Carcinogenicity	Category 2
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Label Elements



Signal Word:

Danger

Hazard Statements

H304 - May be fatal if swallowed and enters airways

H332 - Harmful if inhaled

H351 - Suspected of causing cancer

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

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

P273 - Avoid release to the environment

Precautionary Statements - Response

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

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

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

P331 - Do NOT induce vomiting

P391 - Collect spillage

Precautionary Statements - Storage

P405 - Store locked up

Precautionary Statements - Disposal

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

Other Information

May be harmful if swallowed and enters airways.

May be harmful in contact with skin.

Very toxic to aquatic life with long lasting effects.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

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) Xanthan Gum

Chemical name	CAS-No	Weight %
Xanthan Gum	11138-66-2	<0.1
Iprodione	36734-19-7	10 - 40
Petroleum distillates, solvent dewaxed light paraffinic	64742-56-9	10 - 40
FD & C Blue No.1	3844-45-9	1 - 15
Propylene glycol	57-55-6	1 - 15
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	1 - 15
Phosphoric acid	7664-38-2	<0.1
Water	7732-18-5	10 - 40
Alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9	0.1 - 1
Tristyrylphenol ethoxylate phosphate ester	90093-37-1	0.1 - 1
Dodoxynol-13	9046-09-7	0.1 - 1
Polyaryphenol ethoxylate	99734-09-5	0.1 - 1

Section 4: FIRST AID MEASURES

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.
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.
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.
Ingestion	Call a physician or poison control center immediately. 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 give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	Irritation, Gastrointestinal effects.
Use personal protective equipment. See Section 8 for more detail.	
Indication of immediate medical attention and special treatment needed, if necessary	Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire
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	As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 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	Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.
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 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.

Section 7: HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Do not contaminate
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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.

Materials to avoid

Strong acids, Strong bases, Strong oxidizing agents.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Component	China	Japan	Korea	Australia	Taiwan
Propylene glycol 57-55-6 (1 - 15)				TWA 150 ppm TWA 474 mg/m ³ TWA 10 mg/m ³	
Phosphoric acid 7664-38-2 (<0.1)	TWA: 1 mg/m ³ STEL: 3 mg/m ³	OEL: 1 mg/m ³	STEL: 3 mg/m ³ TWA: 1 mg/m ³	STEL 3 mg/m ³ TWA 1 mg/m ³	STEL 2 mg/m ³

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.

Personal protective equipment**Respiratory Protection**

For dust, splash, mist or spray exposures wear a elastomeric full-face or half mask respirator with appropriate cartridges and/or filters which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization).

Hand Protection

Protective gloves.

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.

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.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Dark blue Viscous Suspension
Odor	Slight
Color	Dark blue
Odor threshold	No information available
pH	2.0 - 4.0
Melting point/freezing point	No information available
Boiling Point/Range	>100 °C
Flash point	No information available
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
Specific gravity	No information available
Water solubility	No information available
Solubility(ies)	No information available
Partition coefficient	No information available

Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Molecular weight	No data available
Relative density	1.037 g/mL
Bulk density	No information available
K _{st}	>0 bar m/s

Section 10: STABILITY AND REACTIVITY

Reactivity	None under normal use conditions
Stability	Stable under recommended storage conditions
Hazardous reactions	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to Avoid	Heat.
Incompatible products	Strong acids, Strong bases, Strong oxidizing agents.
Hazardous Decomposition Products	Carbon oxides (COx). Nitrogen oxides (NOx). Hydrogen chloride.

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Numerical measures of toxicity - Product Information

LD50 Oral	Similar formulation > 2,000 mg/kg (rat)
LD50 Dermal	Similar formulation > 2,000 mg/kg (rat)
LC50 Inhalation (dust)	Similar formulation > 2.88 mg/L 4 hr (rat)

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation (vapor)
FD & C Blue No.1 (3844-45-9)	> 2 g/kg (Rat)		
Propylene glycol (57-55-6)	20000 mg/kg (Rat)	20800 mg/kg (Rabbit)	
Petroleum distillates, solvent dewaxed light paraffinic (64742-56-9)	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 5399 mg/m ³ (Rat) 4 h
Petroleum distillates, solvent dewaxed heavy paraffinic (64742-65-0)	> 15000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 2400 mg/m ³ (Rat) 4 h
Phosphoric acid (7664-38-2)	> 2000 mg/kg (rat)	= 2740 mg/kg (rabbit)	> 850 mg/m ³ (rat) 1 h
Alcohols, C11-14-iso-, C13-rich, ethoxylated (78330-21-9)	588 mg/kg (calculated)		

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

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

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

Reproductive toxicity	controls. Iprodione: No toxicity to reproduction in animal studies. Delayed sexual maturation in males observed at maternally toxic doses.
Developmental toxicity	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.
Chronic toxicity	Iprodione: Prolonged exposure caused liver, adrenal and reproductive organ toxicity at high doses in animal studies.
Target organ effects	Liver, Testes, Adrenal glands.
Neurological effects	Iprodione. Not neurotoxic.
Aspiration hazard	No information available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Very toxic to aquatic life with long lasting effects.

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.
Other Adverse Effects	No information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste disposal methods	Dispose of in accordance with local regulations.
Contaminated containers and packages	Dispose of in accordance with federal, state and local regulations.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

UN/ID no	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o. s. (liquid)
Hazard class	9
Packing Group	III

EmS No. F-A, S-F
Environmental Hazards Iprodione

ICAO/IATA

UN/ID no UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o. s. (liquid)
Hazard class 9
Packing Group III
Environmental Hazards Iprodione

Section 15: REGULATORY INFORMATION

International Inventories

A food, food additive, drug, cosmetic, or device, when manufactured, processed or distributed in commerce for use as a food, food additive, drug, cosmetic, or device may not be subject to local notification requirements. Check local regulations for more information.

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Xanthan Gum 11138-66-2	X	X	X	X	X	X	X	X
Iprodione 36734-19-7			X		X	X		X
Petroleum distillates, solvent dewaxed light paraffinic 64742-56-9	X	X	X		X	X	X	X
FD & C Blue No.1 3844-45-9	X	X	X	X	X	X	X	X
Propylene glycol 57-55-6	X	X	X	X	X	X	X	X
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	X	X	X		X	X	X	X
Phosphoric acid 7664-38-2	X	X	X	X	X	X	X	X
Water 7732-18-5	X	X	X		X	X	X	X
Alcohols, C11-14-iso-, C13-rich, ethoxylated 78330-21-9	X	X			X	X	X	X
Tristyrylphenol ethoxylate phosphate ester 90093-37-1					X			
Dodecylol-13 9046-09-7	X	X			X	X	X	X
Polyarylphenol ethoxylate 99734-09-5		X			X	X		X

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Section 16: OTHER INFORMATION

Prepared By: FMC Corporation

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Revision date: 2021-10-26

Revision note: SDS sections updated.

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End of Safety Data Sheet