

SAFETY DATA SHEET
ROVRAL® WP 50

SDS # : 7075-A
Revision date: 2017-12-06
Format: NA
Version 1.04



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name ROVRAL® WP 50

Other means of identification

Product Code(s) 7075-A

Synonyms IPRADIONE: 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); 3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide

Active Ingredient(s) Iprodione

Chemical Family Dicarboximide

Alternate Commercial Name Rovral® Wettable Powder; Rovral PH

PCP # 15213

Recommended use of the chemical and restrictions on use

Recommended Use: Fungicide

Restrictions on Use: Use as recommended by the label

Supplier 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 / 741-5970 (CHEMTREC - International)
1 703 / 527 3887 (CHEMTREC - Alternate)

Medical Emergencies:
1 800 / 331-3148 (ProPharma Group - U.S.A. & Canada)
1 651 / 632-6793 (ProPharma Group - 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)

| | |
|-----------------------|------------|
| Carcinogenicity | Category 2 |
| Reproductive toxicity | Category 2 |

GHS Label elements, including precautionary statements**EMERGENCY OVERVIEW****Warning****Hazard Statements**

H351 - Suspected of causing cancer

H361 - Suspected of damaging fertility or the unborn child

Physical Hazards

May form combustible dust concentrations in air

**Precautionary Statements - Prevention**

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

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

Precautionary Statements - Storage

P405 - Store locked up

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

May be harmful if swallowed. May be harmful in contact with skin. Very 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 | 50 |
| Kaolin | 1332-58-7 | 30-40 |
| Nonylphenol ethoxylate | 68412-54-4 | 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 |
| <u>Explosion data</u> | |
| Sensitivity to Mechanical Impact | Not sensitive. |
| Sensitivity to Static Discharge | Static electricity might be sufficient to ignite dust clouds. Possibility of ignition will depend on the minimum ignition energy (MIE) and the type of operations undertaken with the material. MIE values are not provided in this SDS. |
| 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 | 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 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 | ACGIH TLV | OSHA PEL | NIOSH | Mexico |
|-----------------------|--------------------------|---|---|---|
| Kaolin (1332-58-7) | TWA: 2 mg/m ³ | TWA: 15 mg/m ³ TWA: 5 mg/m ³ | TWA: 10 mg/m ³ TWA: 5 mg/m ³ | Mexico: TWA 10 mg/m ³ Mexico: STEL 20 mg/m ³ |
| Chemical name | British Columbia | Quebec | Ontario TWAEV | Alberta |
| Kaolin (1332-58-7) | TWA: 2 mg/m ³ | TWA: 5 mg/m ³ | TWA: 2 mg/m ³ respirable | TWA: 2 mg/m ³ |

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 Minimize skin contamination by following good industrial hygiene practices.

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 | Powder |
| Physical State | Solid |
| Color | Gray |
| Odor | None |
| Odor threshold | No information available |
| pH | 6.0 |
| Melting point/freezing point | Not applicable |
| Boiling Point/Range | No information available |
| Flash point | Not applicable |
| 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 | No information available |
| Specific gravity | No information available |
| Water solubility | Dispersible in water |
| Solubility in other solvents | 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 |
| Explosive properties | No information available |
| Oxidizing properties | No information available |
| Molecular weight | 330 |
| Bulk density | 224-368 kg/m ³ |

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 | Carbon oxides (COx). nitrogen oxides (NOx). Sulfur oxides. hydrogen chloride. hydrogen fluoride. |

11. TOXICOLOGICAL INFORMATION

Product Information

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|-----------------------------------|-----------------------|
| LD50 Oral | > 2000 mg/kg (rat) |
| LD50 Dermal | > 2000 mg/kg (rat) |
| LC50 Inhalation | > 5 mg/L 4 hr (rat) |
| Serious eye damage/eye irritation | Mildly irritating. |
| Skin corrosion/irritation | Minimally irritating. |
| Sensitization | Non-sensitizing |

Information on toxicological effects

| | |
|----------|-------------|
| Symptoms | None known. |
|----------|-------------|

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. |
| 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. |
| 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. |
| Target organ effects | Liver, Testes, Adrenal glands |
| Neurological effects | Iprodione Not neurotoxic. |
| Aspiration hazard | No information available. |

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

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|-------------------------------|--|
| 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. Proper personal protective equipment, as described in Sections 7 and 8, must be worn while handling materials for waste disposal. |
| 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

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|-----------------------------|--|
| 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 | UN3077 |
| Proper Shipping Name | Environmentally hazardous substance, solid, n.o.s. |
| Hazard class | 9 |
| Packing Group | III |
| Marine Pollutant | Iprodione. |
| Description | UN3077, Environmentally hazardous substance, solid, n.o.s. (Iprodione), 9, PG III, Marine Pollutant |
| ICAO/IATA | |
| UN/ID no | UN3077 |
| Proper Shipping Name | Environmentally hazardous substance, solid, n.o.s. |
| Hazard class | 9 |
| Packing Group | III |
| Description | UN3077, Environmentally hazardous substance, solid, n.o.s. (Iprodione), 9, PG III, Marine Pollutant |
| IMDG/IMO | |
| UN/ID no | UN3077 |
| Proper Shipping Name | Environmentally hazardous substance, solid, n.o.s. |
| Hazard class | 9 |
| Packing Group | III |
| EmS No. | F-A, S-F |
| Marine Pollutant | Iprodione |
| Description | UN3077, Environmentally hazardous substance, solid, n.o.s. (Iprodione), 9, PG III, 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 inhaled, swallowed and absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

This pesticide is toxic to aquatic invertebrates

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 |
|---------------------|------------|---------------|--------------|
| Kaolin 1332-58-7 | X | X | X |

International Inventories

| Chemical name | TSCA (United States) | DSL (Canada) | EINECS/ELINC S (Europe) | ENCS (Japan) | China (IECSC) | KECL (Korea) | PICCS (Philippines) | AICS (Australia) |
|---------------|-------------------------|-----------------|----------------------------|-----------------|------------------|--------------|------------------------|---------------------|
| Iprodione | | | X | | X | X | | X |

| | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|
| 36734-19-7 | | | | | | | | |
| Kaolin 1332-58-7 | X | X | X | X | X | X | X | X |
| Nonylphenol ethoxylate 68412-54-4 | X | X | X | X | X | X | X | X |

Mexico - Grade Serious risk, Grade 3

| Chemical name | Carcinogen Status | Mexico |
|---------------|-------------------|---|
| Kaolin | | Mexico: TWA 10 mg/m ³ Mexico: STEL 20 mg/m ³ |

WHMIS Statement

This product has been classified in accordance with the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

WHMIS Hazard Class D2B - Toxic materials



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|------------------------------|
| 16. OTHER INFORMATION |
|------------------------------|

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

Revision date: 2017-12-06
Reason for revision: (M)SDS sections updated

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End of Safety Data Sheet