

Rovral® Aquaflo Fungicide

Version	Revision Date:	SDS Number:	Date of last issue: 05.05.2023
1.2	26.09.2023	50001560	Date of first issue: 30.08.2021

Test Type: in vitro DNA damage and/or repair study
 Test system: Bacillus subtilis
 Metabolic activation: with and without metabolic activation
 Result: positive

Test Type: Chromosome aberration test in vitro
 Test system: Chinese hamster ovary cells
 Metabolic activation: with and without metabolic activation
 Result: negative

Test Type: sister chromatid exchange assay
 Test system: Chinese hamster ovary cells
 Metabolic activation: with and without metabolic activation
 Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
 Species: Mouse
 Result: negative

Germ cell mutagenicity - Assessment : Weight of evidence does not support classification as a germ cell mutagen.

propane-1,2-diol:

Genotoxicity in vitro : Test Type: reverse mutation assay
 Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
 Species: Mouse
 Result: negative

Carcinogenicity

Suspected of causing cancer.

Components:**iprodione (ISO):**

Species : Rat, male
 Exposure time : 2 y
 : 6.1 mg/kg bw/day
 : 12.4 mg/kg bw/day
 Result : positive
 Symptoms : Testicular effects
 Target Organs : Adrenal gland, Testes

Species : Rat, female
 Exposure time : 2 y
 : 8.4 mg/kg bw/day
 : 16.5 mg/kg bw/day
 Target Organs : Adrenal gland

Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

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1.2	26.09.2023	50001560	Date of first issue: 30.08.2021

propane-1,2-diol:

Species	:	Rat
Application Route	:	Oral
Exposure time	:	2 Years
Result	:	negative

Reproductive toxicity

Not classified based on available information.

Components:**iprodione (ISO):**

Effects on foetal development	:	Species: Rabbit General Toxicity Maternal: NOAEL: 20 mg/kg bw/day Developmental Toxicity: NOAEL: 60 mg/kg bw/day Symptoms: Reduced body weight, Total Resorptions / resorption rate
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Species: Rat General Toxicity Maternal: NOAEL: 20 mg/kg bw/day Developmental Toxicity: NOAEL: 20 mg/kg bw/day Symptoms: Reduced body weight, foetal mortality Target Organs: Adrenal gland
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Reproductive toxicity - Assessment	:	Weight of evidence does not support classification for reproductive toxicity
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propane-1,2-diol:

Effects on fertility	:	Test Type: reproductive and developmental toxicity study Species: Mouse Application Route: Oral Result: negative
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Effects on foetal development	:	Test Type: Embryo-foetal development Species: Mouse Application Route: Oral Method: OECD Test Guideline 414 Result: Animal testing did not show any effects on fertility. Remarks: Based on data from similar materials
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STOT - single exposure

Not classified based on available information.

Components:**iprodione (ISO):**

Assessment	:	The substance or mixture is not classified as specific target organ toxicant, single exposure.
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STOT - repeated exposure

Not classified based on available information.

SAFETY DATA SHEET



Rovral® Aquaflo Fungicide

Version 1.2 Revision Date: 26.09.2023 SDS Number: 50001560 Date of last issue: 05.05.2023
Date of first issue: 30.08.2021

Components:

iprodione (ISO):

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

iprodione (ISO):

Species : Rat, male
NOAEL : 78 mg/kg
LOAEL : 151 mg/kg
Application Route : Oral
Exposure time : 90 d
Target Organs : Reproductive organs

Species : Rat, female
NOAEL : 89 mg/kg
LOAEL : 189 mg/kg
Application Route : Oral
Exposure time : 90 d
Target Organs : Reproductive organs

Species : Rat, male
NOAEL : 28 mg/kg
LOAEL : 207 mg/kg
Application Route : Inhalation
Exposure time : 28 d
Target Organs : Adrenal gland

Species : Rat, female
NOAEL : 43 mg/kg
LOAEL : 241 mg/kg
Application Route : Inhalation
Exposure time : 28 d
Target Organs : Adrenal gland

propane-1,2-diol:

Species : Rat, male and female
NOAEL : 1,700 mg/kg
Application Route : Oral
Exposure time : 2 Years

Species : Rat, male and female
NOAEL : 1,000 mg/kg
LOAEL : 160 mg/kg
Application Route : Inhalation
Exposure time : 90 Days

Aspiration toxicity

Not classified based on available information.

SAFETY DATA SHEET



Rovral® Aquaflo Fungicide

Version 1.2 Revision Date: 26.09.2023 SDS Number: 50001560 Date of last issue: 05.05.2023
Date of first issue: 30.08.2021

Components:

iprodione (ISO):

The substance does not have properties associated with aspiration hazard potential.

Further information

Product:

Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

iprodione (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.1 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.25 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Scenedesmus subspicatus): > 0.5 mg/l
Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOEC (Fish): 0.26 mg/l
Exposure time: 21 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.17 mg/l
Exposure time: 21 d

Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): > 1,000 mg/kg
Exposure time: 14 d

Toxicity to terrestrial organisms : LD50 (Colinus virginianus (Bobwhite quail)): > 2,000 mg/kg

LD50 (Apis mellifera (bees)): > 250 µg/bee
Exposure time: 48 h
Remarks: Contact

LD50 (Apis mellifera (bees)): > 25 µg/bee
Exposure time: 48 h
Remarks: Oral

propane-1,2-diol:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 40,613 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : (Mysidopsis bahia (opossum shrimp)): 18,800 mg/l

SAFETY DATA SHEET



Rovral® Aquaflo Fungicide

Version 1.2 Revision Date: 26.09.2023 SDS Number: 50001560 Date of last issue: 05.05.2023
Date of first issue: 30.08.2021

aquatic invertebrates Exposure time: 96 h

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 34,100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 13,020 mg/l
Exposure time: 7 d

Toxicity to microorganisms : EC50 (Pseudomonas putida): > 20,000 mg/l
Exposure time: 18 h

Persistence and degradability

Components:

iprodione (ISO):

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life (DT50): 146 d pH: 5
Degradation half life (DT50): 0.2 d pH: 8

propane-1,2-diol:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 23.6 %
Exposure time: 64 d
Method: OECD Test Guideline 306

Bioaccumulative potential

Components:

iprodione (ISO):

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): 70
Remarks: Bioaccumulation is unlikely.
See section 9 for octanol-water partition coefficient.

Partition coefficient: n-octanol/water : log Pow: 3 (20 °C)
pH: 7

propane-1,2-diol:

Partition coefficient: n-octanol/water : log Pow: -1.07

Mobility in soil

Components:

iprodione (ISO):

SAFETY DATA SHEET



Rovral® Aquaflo Fungicide

Version 1.2 Revision Date: 26.09.2023 SDS Number: 50001560 Date of last issue: 05.05.2023
Date of first issue: 30.08.2021

Distribution among environmental compartments : Remarks: Low mobility in soil

Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Iprodione)
Class : 9
Packing group : III
Labels : 9

IATA-DGR

UN/ID No. : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(Iprodione)
Class : 9
Packing group : III
Labels : Miscellaneous
Packing instruction (cargo aircraft) : 964
Packing instruction (passenger aircraft) : 964
Environmentally hazardous : yes

IMDG-Code

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

SAFETY DATA SHEET



Rovral® Aquaflo Fungicide

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Date of first issue: 30.08.2021

Class : (Iprodione)
Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes
Remarks : Environmentally hazardous substances/Marine Pollutants in single or combination packaging containing a net quantity per single or inner packaging of 5 kg or less for solids, or having a net quantity per single or inner packaging of 5 L or less for liquids may be transported as non-dangerous goods as provided in special provision A197 of the IATA and section 2.10.2.7 of IMDG code.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

ADG

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Iprodione)
Class : 9
Packing group : III
Labels : 9
Hazchem Code : •3Z
Remarks : Environmentally hazardous substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the ADG Code when transported by road or rail in packagings that do not incorporate a receptacle exceeding 500 kg / liters, or IBCs

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Standard for the Uniform Scheduling of Medicines and Poisons : No poison schedule number allocated

APVMA Approval No.: 45725

Prohibition/Licensing Requirements : There is no applicable prohibition, authorisation and restricted use

SAFETY DATA SHEET



Rovral® Aquaflo Fungicide

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requirements, including for carcinogens referred to in Schedule 10 of the model WHS Act and Regulations.

The components of this product are reported in the following inventories:

- TCSI : Not in compliance with the inventory
- TSCA : Product contains substance(s) not listed on TSCA inventory.
- AIIC : Not in compliance with the inventory
- DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.

3-(3,5-DICHLOROPHENYL)-N-ISOPROPYL-2,4-DIOXOIMIDAZOLIDINE-1-CARBOXAMIDE
Ethylene oxide/propylene oxide block copolymer
- ENCS : Not in compliance with the inventory
- ISHL : Not in compliance with the inventory
- KECI : Not in compliance with the inventory
- PICCS : Not in compliance with the inventory
- IECSC : Not in compliance with the inventory
- NZIoC : Not in compliance with the inventory

SECTION 16. OTHER INFORMATION

Revision Date : 26.09.2023

Date format : dd.mm.yyyy

Full text of other abbreviations

AU OEL : Australia. Workplace Exposure Standards for Airborne Contaminants.

AU OEL / TWA : Exposure standard - time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and

SAFETY DATA SHEET



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Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECl - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECl - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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