

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ROVRAL® 500 SC

Other means of identification : Iprodione 500 SC

Manufacturer or supplier's details

Company : FMC QUÍMICA DO BRASIL LTDA.

Address : AVENIDA DR. JOSÉ BONIFÁCIO
COUTINHO NOGUEIRA 150 - 1º
ANDAR - JARDIM MADALENA,
CAMPINAS SP BRASIL

Telephone : (19) 2042-4500

E-mail address : SDS-Info@fmc.com

Emergency telephone : Brazil: (34) 3319 3019 or 0800 34 35 450
+55-2139581449 (CHEMTREC)

Recommended use of the chemical and restrictions on use

Recommended use : Fungicide

Restrictions on use : Use as recommended by the label.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification in accordance with ABNT NBR 14725 Standard

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Eye irritation : Category 2B

Carcinogenicity : Category 2

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 2

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

GHS label elements in accordance with ABNT NBR 14725 Standard

Hazard pictograms

:



Signal Word

:

Warning

Hazard Statements

:

H302 + H332 Harmful if swallowed or if inhaled.
H320 Causes eye irritation.
H351 Suspected of causing cancer.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

:

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

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

Other hazards which do not result in classification

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

SAFETY DATA SHEET



ROVRAL® 500 SC

Version 1.0 Revision Date: 02.05.2023 SDS Number: 50000164 Date of last issue: -
Date of first issue: 02.05.2023

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
iprodione (ISO)	36734-19-7	Acute toxicity (Oral), Category 5 Acute toxicity (Inhalation), Category 5 Acute toxicity (Dermal), Category 5 Serious eye damage/eye irritation, Category 2B Carcinogenicity, Category 2 Short-term (acute) aquatic hazard, Category 1 Long-term (chronic) aquatic hazard, Category 1	≥ 30 -< 50
1,2-benzisothiazol-3(2H)-one	2634-33-5	Acute toxicity (Oral), Category 4 Serious eye damage, Category 1 Skin sensitization, Category 1 Short-term (acute) aquatic hazard, Category 1 Long-term (chronic) aquatic hazard, Category 2	$\geq 0,025$ -< 0,1

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and water.
Wash contaminated clothing before re-use.

SAFETY DATA SHEET



ROVRAL® 500 SC

Version 1.0	Revision Date: 02.05.2023	SDS Number: 50000164	Date of last issue: - Date of first issue: 02.05.2023
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| In case of eye contact | : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist. |
| If swallowed | : Do not induce vomiting without medical advice.
Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital. |
| Most important symptoms and effects, both acute and delayed | : Harmful if swallowed or if inhaled.
Causes serious eye irritation.
Suspected of causing cancer. |
| Protection of first-aiders | : Avoid inhalation, ingestion and contact with skin and eyes. |
| Notes to physician | : Treat symptomatically. |
-

SECTION 5. FIRE-FIGHTING MEASURES

- | | |
|--|---|
| Suitable extinguishing media | : Foam
Carbon dioxide (CO ₂)
Dry chemical
Water spray |
| Unsuitable extinguishing media | : Do not spread spilled material with high-pressure water streams. |
| Specific hazards during fire fighting | : Do not allow run-off from fire fighting to enter drains or water courses. |
| Hazardous combustion products | : Thermal decomposition can lead to release of irritating gases and vapors.
Nitrogen oxides (NO _x)
Carbon oxides
Chlorine compounds |
| Specific extinguishing methods | : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for fire-fighters | : Firefighters should wear protective clothing and self-contained breathing apparatus. |
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SECTION 6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions, | : Do not touch or walk through the spilled material. |
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SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

protective equipment and emergency procedures		Evacuate personnel to safe areas. If it can be safely done, stop the leak. Use personal protective equipment.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.
Conditions for safe storage	:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
Further information on storage stability	:	No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection	:	In case of mist, spray or aerosol exposure wear suitable
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SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

personal respiratory protection and protective suit.

Hand protection	
Material	: Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.
Remarks	: The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	: Eye wash bottle with pure water Tightly fitting safety goggles
Skin and body protection	: Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Protective measures	: Plan first aid action before beginning work with this product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid
Form	: suspension
Color	: white
pH	: 5,2 Concentration: 10 g/l
Boiling point/boiling range	: 136 °C
Relative density	: 1,16 Method: OECD Test Guideline 109
Solubility(ies)	
Water solubility	: soluble
Viscosity	
Viscosity, dynamic	: 307,6 mPa.s (20 °C) Method: OECD Test Guideline 114 8,7 mPa.s (40 °C) Method: OECD Test Guideline 114
Viscosity, kinematic	: 0,264 mm ² /s (20 °C)

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

Explosive properties	: Not explosive
Oxidizing properties	: Non-oxidizing
Surface tension	: 33 mN/m, 25 °C, OECD Test Guideline 115
Particle Size Distribution	: D10 = 0,77 µm D50 = 1,96 µm D90 = 4,88 µm

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: Heat, flames and sparks. Avoid formation of aerosol.
Incompatible materials	: Strong bases Strong oxidizing agents Strong acids
Hazardous decomposition products	: No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed or if inhaled.

Product:

Acute oral toxicity	: LD50 (Rat): > 2.000 mg/kg Method: OECD Test Guideline 423 Target Organs: Gastro-intestinal system Symptoms: ataxia, Ulceration Assessment: The component/mixture is moderately toxic after single ingestion.
Acute inhalation toxicity	: LC50 (Rat): > 1,114 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Target Organs: Liver, Lungs
Acute dermal toxicity	: LD50 (Rat): > 4.000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

Remarks: no mortality

Components:

iprodione (ISO):

Acute oral toxicity : LD50 (Rat, male and female): > 2.000 mg/kg
Assessment: The component/mixture is minimally toxic after single ingestion.

Acute inhalation toxicity : LC50 (Rat): > 3,29 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Symptoms: Breathing difficulties
Assessment: The component/mixture is minimally toxic after short term inhalation.
Remarks: no mortality

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg
Method: EPA OPP 81-2
Symptoms: Irritation
GLP: yes
Assessment: The component/mixture is minimally toxic after single contact with skin.

1,2-benzisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat, male and female): 490 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Not classified based on available information.

Product:

Species : Rabbit
Assessment : Not classified as irritant
Method : OECD Test Guideline 404
Result : No skin irritation

Components:

iprodione (ISO):

Species : Rabbit
Assessment : Not classified as irritant
Method : EPA OPP 81-5
Result : No skin irritation
GLP : yes

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

1,2-benzisothiazol-3(2H)-one:

Species	:	Rabbit
Exposure time	:	72 h
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Species	:	Rabbit
Result	:	Mild eye irritation
Assessment	:	Mild eye irritation
Method	:	OECD Test Guideline 405

Components:

iprodione (ISO):

Species	:	Rabbit
Result	:	Mild eye irritant
Assessment	:	Mild eye irritation
Method	:	EPA OPP 81-4
GLP	:	yes

1,2-benzisothiazol-3(2H)-one:

Species	:	Bovine cornea
Result	:	No eye irritation
Method	:	OECD Test Guideline 437

Species	:	Rabbit
Result	:	Irreversible effects on the eye
Method	:	EPA OPP 81-4

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Test Type	:	Buehler Test
Species	:	Guinea pig
Assessment	:	Not a skin sensitizer.
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitization.

SAFETY DATA SHEET

ROVRAL® 500 SC



Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

Components:

iprodione (ISO):

Test Type	: Buehler Test
Species	: Guinea pig
Assessment	: Not a skin sensitizer.
Method	: EPA OPP 81-6
Result	: Does not cause skin sensitization.

1,2-benzisothiazol-3(2H)-one:

Test Type	: Maximization Test
Species	: Guinea pig
Method	: OECD Test Guideline 406
Result	: May cause sensitization by skin contact.

Species	: Guinea pig
Method	: FIFRA 81.06
Result	: May cause sensitization by skin contact.

Germ cell mutagenicity

Not classified based on available information.

Product:

Genotoxicity in vitro	: Test Type: Ames test Method: OECD Test Guideline 471 Result: negative
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Genotoxicity in vivo	: Test Type: Micronucleus test Species: mice Method: OECD Test Guideline 474 Result: negative
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Components:

iprodione (ISO):

Genotoxicity in vitro	: Test Type: Ames test Metabolic activation: with and without metabolic activation Result: negative
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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

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

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.

1,2-benzisothiazol-3(2H)-one:

Genotoxicity in vitro : Test Type: gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Test Type: Ames test
Method: OECD Test Guideline 471
Result: negative

Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: positive

Genotoxicity in vivo : Test Type: unscheduled DNA synthesis assay
Species: Rat (male)
Cell type: Liver cells
Application Route: Ingestion
Exposure time: 4 h
Method: OECD Test Guideline 486
Result: negative

Test Type: Micronucleus test
Species: Mouse
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

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

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

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

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 - : Limited evidence of carcinogenicity in animal studies
Assessment

Reproductive toxicity

Not classified based on available information.

Components:

iprodione (ISO):

Effects on fetal 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.

Species: Rat
General Toxicity Maternal: NOAEL: 20 mg/kg bw/day
Developmental Toxicity: NOAEL: 20 mg/kg bw/day
Symptoms: Reduced body weight, Fetal mortality.
Target Organs: Adrenal gland

Reproductive toxicity - : Weight of evidence does not support classification for
Assessment reproductive toxicity

1,2-benzisothiazol-3(2H)-one:

Effects on fertility : Species: Rat, male
Application Route: Ingestion
General Toxicity Parent: NOAEL: 18,5 mg/kg body weight
General Toxicity F1: NOAEL: 48 mg/kg body weight
Fertility: NOAEL: 112 mg/kg bw/day
Symptoms: No effects on reproduction parameters.
Method: OPPTS 870.3800
Result: negative

Reproductive toxicity - : Weight of evidence does not support classification for
Assessment reproductive toxicity

STOT-single exposure

Not classified based on available information.

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

Components:

iprodione (ISO):

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

STOT-repeated exposure

Not classified based on available information.

Components:

iprodione (ISO):

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

1,2-benzisothiazol-3(2H)-one:

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

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

1,2-benzisothiazol-3(2H)-one:

Species	: Rat, male and female
NOAEL	: 15 mg/kg
Application Route	: Ingestion
Exposure time	: 28 d
Method	: OECD Test Guideline 407
Symptoms	: Irritation

Species	: Rat, male and female
NOAEL	: 69 mg/kg
Application Route	: Ingestion
Exposure time	: 90 d
Symptoms	: Irritation, Reduced body weight

Aspiration toxicity

Not classified based on available information.

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

Product:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 113,1 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

NOEC (Danio rerio (zebra fish)): 80 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other : EC50 (Daphnia): 1,04 mg/l
aquatic invertebrates : End point: Immobilization
Exposure time: 48 h
Method: OECD Test Guideline 202

EC50 (Daphnia): 0,5 mg/l
End point: Immobilization
Exposure time: 48 h

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (*Pseudokirchneriella subcapitata* (algae)): 10,56 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC (*Pseudokirchneriella subcapitata* (algae)): 1 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to soil dwelling organisms : Method: OECD Test Guideline 217
Remarks: No significant adverse effect on Carbon mineralization.

Method: OECD Test Guideline 216
Remarks: No significant adverse effect on Nitrogen mineralization.

LC50 (*Eisenia fetida* (earthworms)): > 1.000 mg/kg
Exposure time: 14 d
Method: OECD Test Guideline 207

Toxicity to terrestrial organisms : LD50 (*Colinus virginianus* (Bobwhite quail)): > 2.000 mg/kg
Method: OECD Test Guideline 223

LD50 (*Apis mellifera* (bees)): > 200 µg/bee
Exposure time: 48 h
Method: OECD Test Guideline 214
Remarks: Contact

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

M-Factor (Acute aquatic toxicity) : 1

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

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

- M-Factor (Chronic aquatic toxicity) : 1
- 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
- 1,2-benzisothiazol-3(2H)-one:**
- Toxicity to fish : LC50 (*Cyprinodon variegatus* (sheepshead minnow)): 16,7 mg/l
Exposure time: 96 h
Test Type: static test
- LC50 (*Oncorhynchus mykiss* (rainbow trout)): 2,15 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): 2,9 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : EC50 (*Pseudokirchneriella subcapitata* (green algae)): 0,070 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- NOEC (*Pseudokirchneriella subcapitata* (green algae)): 0,04 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
- M-Factor (Acute aquatic toxicity) : 10
- Toxicity to microorganisms : EC50 (activated sludge): 24 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition
Method: OECD Test Guideline 209
- EC50 (activated sludge): 12,8 mg/l
Exposure time: 3 h

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

Test Type: Respiration inhibition
Method: OECD Test Guideline 209

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

1,2-benzisothiazol-3(2H)-one:

Biodegradability : Result: rapidly biodegradable
Method: OECD Test Guideline 301C

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

1,2-benzisothiazol-3(2H)-one:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): 6,62
Exposure time: 56 d
Method: OECD Test Guideline 305
Remarks: This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Partition coefficient: n-octanol/water : log Pow: 0,7 (20 °C)
pH: 7

log Pow: 0,99 (20 °C)
pH: 5

Mobility in soil

Components:

iprodione (ISO):

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

Distribution among environmental compartments : Remarks: Low mobility in soil.

1,2-benzisothiazol-3(2H)-one:

Distribution among environmental compartments : Koc: 9,33 ml/g, log Koc: 0,97
Method: OECD Test Guideline 121
Remarks: Highly mobile in soils

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 : It is prohibited to reuse, bury, burn or sell packaging.

Washable packaging: Triple wash packs of less than 20 liters and pressure wash packs of 20 liters or more. Triple Wash (Manual Wash): Completely empty the contents of the package into the sprayer tank, keeping it in an upright position for 30 seconds; Add clean water to the package up to ¼ of its volume; Cover the package well and shake it for 30 seconds; Pour the wash water into the spray tank; Do this operation three times; Make the plastic or metal packaging unusable by perforating the bottom.

Pressure wash: Fit the empty package in the appropriate place of the funnel installed on the sprayer; Activate the mechanism to release the water jet; Direct the water jet to all the inside walls of the package, for 30 seconds; Wash water must be transferred to the sprayer tank; Make the plastic or metal packaging unusable by perforating the bottom. In both procedures, puncture the container at its base without damaging the label. Within a period of up to one year from the date of purchase, the user must return the empty packaging, with lid, to the establishment where the product was purchased or to the place indicated on the invoice, issued at the time of purchase. Activate the mechanism to release the water jet. Direct the water jet to all the inside walls of the package, for 30 seconds. Wash water must be transferred to

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

the sprayer tank. Make the plastic or metal packaging unusable by perforating the bottom.

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. (Iprodione)
Class	: 9
Packing group	: III
Labels	: 9
EmS Code	: F-A, S-F
Marine pollutant	: yes

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

Not applicable for product as supplied.

Domestic regulation

ANTT

UN number	: UN 3082
Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Iprodione)
Class	: 9
Packing group	: III
Labels	: 9
Hazard Identification Number	: 90

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

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

Law No. 7802 of July 11, 1989. Decree No. 4074 of January 4, 2002 and its regulatory rules. ANTT Resolution nº 5.998/22 of November 3, 2022. This FISPQ was prepared in accordance with the criteria of ABNT NBR 14725. It is recommended that the user pay attention to local regulations

SECTION 16. OTHER INFORMATION

Revision Date : 02.05.2023

Date format : dd.mm.yyyy

Full text of other abbreviations

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 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; KECI - 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;

SAFETY DATA SHEET



ROVRAL® 500 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	02.05.2023	50000164	Date of first issue: 02.05.2023

SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - 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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