SAFETY DATA SHEET

ROVRAL 255 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	2023/10/18	50000534	Date of first issue: 2023/10/18

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ROVRAL 255 SC

Other means of identification : Iprodione 255 g/L SC

Recommended use of the chemical and restrictions on use

Recommended use : Fungicide

Restrictions on use : Use as recommended by the label.

Manufacturer or supplier's details

Company : FMC Corporation

Address : 2929 WALNUT ST
PHILADELPHIA PA 19104
USA

Telephone : (215) 299-6000

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

Emergency telephone : For leak, fire, spill or accident emergencies, call:
001-803-017-9114 (CHEMTREC)
1 703 / 741-5970 (CHEMTREC - International)

Medical emergency:
0800 140 1447

2. HAZARDS IDENTIFICATION

GHS Classification

Carcinogenicity : Category 2

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 2

GHS label elements

Hazard pictograms :

Signal Word : Warning

Hazard Statements : 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.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P308 + P313 IF exposed or concerned: 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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
iprodione (ISO)	36734-19-7	>= 10 -< 25
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspecified	72623-86-0	>= 30 -< 60
2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates	90093-37-1	< 10
Poly(oxy-1,2-ethanediyl), α-[tris(1-phenylethyl)phenyl]-ω-hydroxy-	99734-09-5	>= 0,25 -< 2,5

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	:	Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.
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	:	Induce vomiting immediately and call a physician. 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	:	Suspected of causing cancer.
Notes to physician	:	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Dry chemical, CO2, water spray or regular foam.
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Fire may produce irritating, corrosive and/or toxic gases. Nitrogen oxides (NOx) Carbon oxides Chlorine compounds Hydrogen cyanide Hydrogen chloride
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	:	Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	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.

7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	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.
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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspecified	72623-86-0	TWA (Inhalable particulate matter)	5 mg/m3	ACGIH

Personal protective equipment

Respiratory protection	:	In case of mist, spray or aerosol exposure wear suitable 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.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	liquid
Form	:	suspension
Color	:	light green
Odor	:	odorless
pH	:	3 - 5 (1% solution in water)
Melting point/freezing point	:	not determined
Boiling point/boiling range	:	> 100 °C
Flash point	:	> 100 °C
Flammability (solid, gas)	:	Not applicable
Self-ignition	:	430 °C
Upper explosion limit / Upper flammability limit	:	not determined

Lower explosion limit / Lower flammability limit	:	not determined
Density	:	1,02 g/cm3
Partition coefficient: n-octanol/water	:	Not applicable
Viscosity		
Viscosity, dynamic	:	40 - 100 mPa.s (20 °C)
Explosive properties	:	Not explosive
Oxidizing properties	:	Non-oxidizing
Particle size	:	Not applicable

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	:	Protect from frost, heat and sunlight.
Incompatible materials	:	Strong oxidizing agents Strong acids and strong bases
Hazardous decomposition products	:	Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Based on available data, the classification criteria are not met.

Product:

Acute oral toxicity	:	LD50 (Rat, male and female): > 2.000 mg/kg Method: OECD Test Guideline 401 Assessment: The substance or mixture has no acute oral toxicity Remarks: Based on data from similar materials
Acute inhalation toxicity	:	LC50 (Rat, male and female): > 2,88 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhalation toxicity
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
Remarks: Based on data from similar materials

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.

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspecified:

Acute oral toxicity : LD0 (Rat, male and female): > 5.000 mg/kg
Method: OECD Test Guideline 401
Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat, male and female): > 5,53 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Based on data from similar materials

Acute dermal toxicity : LD0 (Rabbit, male and female): > 5.000 mg/kg
Method: OECD Test Guideline 402
Remarks: Based on data from similar materials

2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Poly(oxy-1,2-ethanediyl), α-[tris(1-phenylethyl)phenyl]-ω-hydroxy-:

Acute oral toxicity	:	LD50 (Rat, male and female): > 5.000 mg/kg Method: OECD Test Guideline 401 Remarks: Based on data from similar materials
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

Based on available data, the classification criteria are not met.

Product:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation
Remarks	:	Based on data from similar materials

Components:

iprodione (ISO):

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

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspecified:

Species	:	Rabbit
Result	:	No skin irritation
Remarks	:	Based on data from similar materials

2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates:

Species	:	Rabbit
Result	:	No skin irritation

Poly(oxy-1,2-ethanediyl), α-[tris(1-phenylethyl)phenyl]-ω-hydroxy-:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Product:

Species	:	Rabbit
Result	:	No eye irritation
Method	:	OECD Test Guideline 405
Remarks	:	Based on data from similar materials

Components:

iprodione (ISO):

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

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspecified:

Species	:	Rabbit
Result	:	No eye irritation
Remarks	:	Based on data from similar materials

2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates:

Species	:	Rabbit
Result	:	Irritation to eyes, reversing within 21 days

Poly(oxy-1,2-ethanediyl), α-[tris(1-phenylethyl)phenyl]-ω-hydroxy-:

Species	:	Rabbit
Result	:	No eye irritation
Method	:	OECD Test Guideline 405

Respiratory or skin sensitization

Skin sensitization

Based on available data, the classification criteria are not met.

Respiratory sensitization

Not classified due to lack of data.

Product:

Test Type	:	Modified Buehler Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Result	:	Does not cause skin sensitization.
Remarks	:	Based on data from similar materials

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.

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspecified:

Test Type	:	Buehler Test

Species	:	Guinea pig
Result	:	Does not cause skin sensitization.
Remarks	:	Based on data from similar materials

2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates:

Result	:	Does not cause skin sensitization.

Germ cell mutagenicity

Not classified due to lack of data.

Product:

Germ cell mutagenicity - Assessment	:	Contains no ingredient listed as a mutagen

Components:

iprodione (ISO):

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

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspecified:

Genotoxicity in vitro	:	Test Type: reverse mutation assay Result: negative Remarks: Based on data from similar materials Test Type: reverse mutation assay Result: positive Remarks: Based on data from similar materials

Test Type: gene mutation test
Method: OECD Test Guideline 476
Result: negative
Remarks: Based on data from similar materials

Test Type: gene mutation test
Method: OECD Test Guideline 476
Result: positive
Remarks: Based on data from similar materials

Test Type: Chromosome aberration test in vitro
Result: negative
Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 474
Result: negative
Remarks: Based on data from similar materials

2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates:

Germ cell mutagenicity - Assessment : No genotoxic potential.

Poly(oxy-1,2-ethanediyl), α-[tris(1-phenylethyl)phenyl]-ω-hydroxy-:

Genotoxicity in vitro : Test Type: reverse mutation assay
Method: OECD Test Guideline 471
Result: negative

Genotoxicity in vivo : Remarks: No data available

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

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspecified:

Species	:	Mouse, female
Application Route	:	Dermal
Exposure time	:	78 weeks
Result	:	negative
Remarks	:	Based on data from similar materials

2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates:

Carcinogenicity - Assessment	:	Weight of evidence does not support classification as a carcinogen

Reproductive toxicity

Not classified due to lack of data.

Product:

Reproductive toxicity - Assessment	:	Contains no ingredient listed as toxic to reproduction

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

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspecified:

Effects on fertility	:	Test Type: reproductive and developmental toxicity study Species: Rat, male and female Application Route: Oral Dose: 1000 mg/kg/day General Toxicity Parent: NOAEL: 1.000 mg/kg body weight General Toxicity F1: NOAEL: >= 1.000 mg/kg bw/day Method: OECD Test Guideline 421 Result: negative Remarks: Based on data from similar materials

Effects on fetal development : Test Type: reproductive and developmental toxicity study
Species: Rat
Application Route: Dermal
Dose: 0,8,30,125,500,1000mg/kg/day
Duration of Single Treatment: 20 d
General Toxicity Maternal: LOAEL: 8 mg/kg body weight
Developmental Toxicity: LOAEL: 125 mg/kg bw/day
Result: Embryotoxic effects and adverse effects on the off-spring were detected only at high maternally toxic doses
Remarks: Based on data from similar materials

2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates:

Reproductive toxicity - Assessment : No toxicity to reproduction

STOT-single exposure

Not classified due to lack of data.

Components:

iprodione (ISO):

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

2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates:

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

STOT-repeated exposure

Not classified due to lack of data.

Components:

iprodione (ISO):

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

2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates:

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

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspecified:

Species	:	Rat, male
LOAEL	:	125 mg/kg bw/day
Application Route	:	Oral - gavage
Exposure time	:	13 weeks
Dose	:	125 or 500 mg/kg/day
Remarks	:	Based on data from similar materials

Species	:	Rat, male and female
NOAEL	:	980 mg/m3
Application Route	:	Inhalation
Test atmosphere	:	vapor
Exposure time	:	28 d
Dose	:	0, 50, 220 or 1000 mg/m3
Remarks	:	Based on data from similar materials

Species	:	Rabbit, male and female
NOAEL	:	1000 mg/kg bw/day
LOAEL	:	2000 mg/kg bw/day
Application Route	:	Skin contact
Exposure time	:	28 d
Dose	:	200,1000,2000mg/kgbw/day
Method	:	OECD Test Guideline 410
Remarks	:	Based on data from similar materials

Aspiration toxicity

Based on available data, the classification criteria are not met.

Product:

No aspiration toxicity classification

Components:

iprodione (ISO):
The substance does not have properties associated with aspiration hazard potential.

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspecified:
May be fatal if swallowed and enters airways.

2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates:
No aspiration toxicity classification

Further information

Product:

Remarks	:	No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish	:	LC50 (Fish): 24 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia): >= 0,46 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	ErC50 (algae): 12,8 mg/l Exposure time: 72 h

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	:	NOEC (Daphnia magna (Water flea)): 0,17 mg/l

aquatic invertebrates (Chronic toxicity)		Exposure time: 21 d
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

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspecified:

Toxicity to fish	:	LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: Based on data from similar materials water accommodated fractions (WAF)
Toxicity to daphnia and other aquatic invertebrates	:	EL50 (Daphnia): > 10.000 mg/l Exposure time: 48 h Test Type: static test Remarks: Based on data from similar materials water accommodated fractions (WAF)
Toxicity to algae/aquatic plants	:	NOELR (Pseudokirchneriella subcapitata (algae)): >= 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: water accommodated fractions (WAF)
Toxicity to fish (Chronic toxicity)	:	NOELR (Oncorhynchus mykiss (rainbow trout)): >= 1.000 mg/l Exposure time: 14 d Method: QSAR
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOELR (Daphnia magna (Water flea)): 10 mg/l Exposure time: 21 d Test Type: semi-static test Remarks: water accommodated fractions (WAF)
Toxicity to microorganisms	:	NOEL (Photobacterium phosphoreum): > 1,93 mg/l Exposure time: 10 min
Toxicity to terrestrial organisms	:	NOEC (Anas platyrhynchos (Mallard duck)): 5.000 ppm Exposure time: 126 d

2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 3.000 mg/l
Exposure time: 48 h
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 550 mg/l
Exposure time: 24 h
Remarks: Based on data from similar materials

Poly(oxy-1,2-ethanediyl), α-[tris(1-phenylethyl)phenyl]-ω-hydroxy-:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 21 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to microorganisms : Remarks: No data available

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

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspecified:

Biodegradability : Inoculum: activated sludge
Result: Inherently biodegradable.
Biodegradation: 31 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

Inoculum: activated sludge
Result: Not inherently biodegradable.
Biodegradation: 2 - 8 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates:

Biodegradability : Result: Not readily biodegradable.

Poly(oxy-1,2-ethanediyl), α-[tris(1-phenylethyl)phenyl]-ω-hydroxy-:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 8 %
Exposure time: 28 d
Method: OECD Test Guideline 301

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

Poly(oxy-1,2-ethanediyl), α-[tris(1-phenylethyl)phenyl]-ω-hydroxy-:

Partition coefficient: n-octanol/water	:	Remarks: No data available

Mobility in soil

Components:

iprodione (ISO):

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. Toxic to aquatic life with long lasting effects.

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.

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.

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.

15. REGULATORY INFORMATION

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

Minister of Industry Regulation No. 23/M-IND/PER/4/2013 concerning the Revision of Minister of Industry Regulation No. 87/M-IND/PER/9/2009 concerning Globally Harmonized System of Classification and Labelling of Chemicals.

Regulation of the Minister of Health No. 472 of 1996 on the Safeguarding of Substances Hazardous to Health

Hazardous substances that must be registered : Not applicable

Government Regulation No. 74 of 2001 on the Management of Hazardous and Toxic Substances

Hazardous substances approved for use	:	Not applicable
Prohibited substances	:	Not applicable
Restricted substances	:	Not applicable

Regulation of the Ministry of Trade No. 7 of 2022 on Distribution and Control of Hazardous Materials

Type of hazardous materials subject to distribution and control, Annex I	:	Not applicable
Type of hazardous materials subject to distribution and control, Annex II	:	Not applicable

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

TCSI	:	On the inventory, or 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 2,4,6-tris(1-Phenylethyl)polyoxyethylenated phosphates
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

16. OTHER INFORMATION

Revision Date	:	2023/10/18
Date format	:	yyyy/mm/dd

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)

ACGIH / TWA : 8-hour, 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 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; 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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