SAFETY DATA SHEET

VANTACOR® Insecticide

Version	Revision Date:	SDS Number:	Date of last issue: 05.09.2024
1.2	23.09.2024	50002517	Date of first issue: 05.05.2023

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : VANTACOR® Insecticide

Recommended use of the chemical and restrictions on use

Recommended use : Insecticide

Restrictions on use : Use as recommended by the label.

Manufacturer or supplier's details

Company : FMC Australasia Pty Ltd

Address : Building B, Suite G.01, 12 Julius Avenue
North Ryde NSW 2113
Australia

Telephone : 1 800 066 355

Telefax : (02) 9923 6011

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

Emergency telephone number : For leak, fire, spill or accident emergencies, call:
1800 033 111 (Ixom)

Medical emergency:
1 800 033 111 (Transport and 24 h Medical information)

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

Other hazards which do not result in classification

Very toxic to aquatic life with long lasting effects.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Chlorantraniliprole	500008-45-7	>= 30 -< 50
propane-1,2-diol	57-55-6	< 10
glycerol	56-81-5	< 10
Alkylnaphthalenesulfonic acid, polymer with formaldehyde, sodium salt	68425-94-5	< 10

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 : Move to fresh air.
If unconscious, place in recovery position and seek medical advice.
If experiencing any discomfort, immediately remove from exposure. Get medical attention if discomfort does not disappear.

In case of skin contact : If on clothes, remove clothes.
If on skin, rinse well with water.
Wash off with soap and plenty of water.
Get medical attention immediately 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 : 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.

Most important symptoms and effects, both acute and delayed : None known.

Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing
Avoid inhalation, ingestion and contact with skin and eyes.
If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician : Treat symptomatically.
Immediate medical attention is required in case of ingestion.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Dry chemical Carbon dioxide (CO2) Foam Water spray
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 Bromine compounds Chlorine compounds Hydrogen cyanide Hydrogen chloride Sulphur oxides
Specific extinguishing methods	:	Remove undamaged containers from fire area if it is safe to do so. Use a water spray to cool fully closed containers. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. 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 firefighters	:	Firefighters should wear protective clothing and self-contained breathing apparatus.
Hazchem Code	:	•3Z

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Evacuate personnel to safe areas. Use personal protective equipment. If it can be safely done, stop the leak. Do not touch or walk through the spilled material. Never return spills in original containers for re-use. Mark the contaminated area with signs and prevent access to unauthorized personnel. Only qualified personnel equipped with suitable protective equipment may intervene.
Environmental precautions	:	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Never return spills in original containers for re-use. Collect as much of the spill as possible with a suitable absor-

bent material.
Pick up and transfer to properly labelled containers.
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	:	Do not breathe vapours/dust. 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	:	Avoid contact with skin, eyes and clothing. Do not inhale aerosol. 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. Electrical installations / working materials must comply with the technological safety standards.
Further information on storage conditions	:	The product is stable under normal conditions of warehouse storage. Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.
Further information on storage stability	:	No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
propane-1,2-diol	57-55-6	TWA (particulate)	10 mg/m3	AU OEL
		TWA (Total	150 ppm	AU OEL

		(vapour and particles))	474 mg/m3	
glycerol	56-81-5	TWA (Mist)	10 mg/m3	AU OEL

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.

Protective measures : Plan first aid action before beginning work with this product.
Always have on hand a first-aid kit, together with proper instructions.
Wear suitable protective equipment.
When using do not eat, drink or smoke.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instructions for use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : suspension

Colour : off-white

Odour : mild aromatic

Odour Threshold : No data available

pH : 5.6
Concentration: 100 %
Method: CIPAC MT 75.3

5.2
Method: CIPAC MT 75.3
(at 1% suspension)

Melting point/freezing point	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	> 100 °C
Evaporation rate	:	No data available
Flammability (liquids)	:	Not expected to be ignitable
Self-ignition	:	> 600 °C Method: EEC A.15
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	Not available for this mixture.
Relative vapour density	:	No data available
Relative density	:	ca. 1.26 (20 °C) Method: Regulation (EC) No. 440/2008, Annex, A.3
Solubility(ies)		
Water solubility	:	dispersible
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	458 - 724 mPa,s (20 °C) Method: CIPAC MT 192 436 - 708 mPa,s (40 °C) Method: CIPAC MT 192
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	Non-oxidizing
Surface tension	:	57.41 mN/m, 5 g/l, 20 °C
Molecular weight	:	Not applicable

Metal corrosion rate	:	ca. 0.01 mm/a
Particle size	:	Not applicable

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	:	Avoid extreme temperatures Avoid formation of aerosol. Heating of the mixture may evolve harmful and irritant vapours.
Incompatible materials	:	Avoid strong acids, bases, and oxidizers
Hazardous decomposition products	:	Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

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

Product:

Acute oral toxicity	:	LD50 (Rat, female): > 5,000 mg/kg Method: OECD Test Guideline 425 GLP: yes Assessment: The substance or mixture has no acute oral toxicity Remarks: no mortality
Acute inhalation toxicity	:	LC50 (Rat, male and female): > 5.16 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 GLP: yes Assessment: The substance or mixture has no acute inhalation toxicity Remarks: no mortality
Acute dermal toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 402 Symptoms: Irritation

Assessment: The substance or mixture has no acute dermal toxicity
Remarks: no mortality

Components:

Chlorantraniliprole:

Acute oral toxicity : LD50 (Rat, female): > 5,000 mg/kg
Method: OECD Test Guideline 425
GLP: yes

LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 425
GLP: yes
Remarks: Information source: Internal study report

LD50 (Mouse, female): > 2,000 mg/kg
Method: OECD Test Guideline 425
GLP: no

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: yes
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Information source: Internal study report

LC50 (Rat, male and female): > 5.1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
GLP: yes
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: no mortality

LC50 (Rat, male and female): > 5.0 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: GB 15670-1995
GLP: yes
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: no mortality

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Remarks: Information source: Internal study report

LD50 (Rat, male and female): > 5,000 mg/kg
Method: GB 15670-1995

GLP: yes
Remarks: no mortality

LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Remarks: no mortality

propane-1,2-diol:

Acute oral toxicity : LD50 (Rat, male and female): 22,000 mg/kg

Acute inhalation toxicity : LC0 (Rabbit): 31.7 mg/l
Exposure time: 2 h
Test atmosphere: vapour
Remarks: no mortality

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

glycerol:

Acute oral toxicity : LD50 (Rat, female): 11,500 mg/kg

Acute inhalation toxicity : LC0 (Rat, male): 11 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Guinea pig, male and female): 56,750 mg/kg

Alkylnaphthalenesulfonic acid, polymer with formaldehyde, sodium salt:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

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 : Minimal effects that do not meet the threshold for classification.

Components:

Chlorantraniliprole:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation
GLP : yes
Remarks : Information source: Internal study report

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

Species	:	Rabbit
Method	:	GB 15670-1995
Result	:	No skin irritation
GLP	:	yes

propane-1,2-diol:

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

glycerol:

Species	:	Rabbit
Result	:	No skin irritation

Alkylnaphthalenesulfonic acid, polymer with formaldehyde, sodium salt:

Remarks	:	No data available

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	:	Minimal effects that do not meet the threshold for classification.

Components:

Chlorantraniliprole:

Species	:	Rabbit
Result	:	No eye irritation
Method	:	OECD Test Guideline 405
GLP	:	yes
Remarks	:	Information source: Internal study report

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

Species	:	Rabbit
Result	:	Slight or no eye irritation
Assessment	:	Not classified as irritant
Method	:	OECD Test Guideline 405
GLP	:	yes

propane-1,2-diol:

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

glycerol:

Species	:	Rabbit
Result	:	No eye irritation

Alkylnaphthalenesulfonic acid, polymer with formaldehyde, sodium salt:

Result	:	Eye irritation

Respiratory or skin sensitisation

Skin sensitisation

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

Respiratory sensitisation

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

Product:

Test Type	:	Local lymph node assay (LLNA)
Species	:	mice
Method	:	OECD Test Guideline 429
Result	:	Not a skin sensitizer.
GLP	:	yes

Components:

Chlorantraniliprole:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.
GLP	:	yes
Remarks	:	Information source: Internal study report

Test Type	:	Local lymph node assay (LLNA)
Species	:	mice
Method	:	OECD Test Guideline 429
Result	:	Does not cause skin sensitisation.

propane-1,2-diol:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Result	:	negative

Chronic toxicity

Germ cell mutagenicity

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

Product:

Genotoxicity in vitro : Test Type: reverse mutation assay
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes

Test Type: Micronucleus test
Test system: Human lymphocytes
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 487
Result: negative
GLP: yes

Components:

Chlorantraniliprole:

Genotoxicity in vitro : Test Type: reverse mutation assay
Metabolic activation: with and without metabolic activation
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster ovary cells
Method: OECD Test Guideline 476
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse
Method: OECD Test Guideline 474
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

glycerol:

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

Carcinogenicity

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

Components:

Chlorantraniliprole:

Species	:	Rat, male and female
Application Route	:	Oral
Exposure time	:	2 Years
NOAEL	:	805 - 1,076 mg/kg bw/day
Method	:	OECD Test Guideline 453
Result	:	negative

Species	:	Mouse, male and female
Application Route	:	Oral
Exposure time	:	18 month(s)
NOAEL	:	158 - 1,155 mg/kg bw/day
Method	:	OECD Test Guideline 453
Result	:	negative

Carcinogenicity - Assessment	:	Animal testing did not show any carcinogenic effects.

propane-1,2-diol:

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

glycerol:

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

Reproductive toxicity

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

Components:

Chlorantraniliprole:

Effects on fertility	:	Test Type: Two-generation study Species: Rat, male and female Application Route: Oral General Toxicity - Parent: NOAEL: 20,000 ppm General Toxicity F1: NOAEL: 20,000 ppm Method: OECD Test Guideline 416 Result: negative
Effects on foetal development	:	Test Type: Pre-natal Species: Rat Application Route: Oral

Duration of Single Treatment: 6 - 20 Days
General Toxicity Maternal: NOEL: 1,000 mg/kg bw/day
Developmental Toxicity: NOEL: 1,000 mg/kg bw/day
Method: OECD Test Guideline 414
Result: negative

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

propane-1,2-diol:

Effects on fertility : Test Type: reproductive and developmental toxicity study
Species: Mouse
Application Route: Oral
Result: negative

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

glycerol:

Effects on fertility : Test Type: Two-generation study
Species: Rat
Application Route: Oral
Result: negative

Effects on foetal development : Test Type: Two-generation study
Species: Rat
Application Route: Oral
Result: negative

STOT - single exposure

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

Components:

Chlorantraniliprole:

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

STOT - repeated exposure

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

Components:

Chlorantraniliprole:

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

Repeated dose toxicity

Components:

Chlorantraniliprole:

Species	:	Rat, male and female
NOEL	:	1188 - 1526 mg/kg
Application Route	:	Oral
Exposure time	:	90 Days
Method	:	OECD Test Guideline 408

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

glycerol:

Species	:	Rat
LOAEL	:	1 mg/kg
Application Route	:	Inhalation
Exposure time	:	14 d
Dose	:	0, 1, 1.93, 3.91 mg/L
Symptoms	:	respiratory tract irritation, Fatality

Species	:	Rat
NOAEL	:	0.165 mg/l
LOAEL	:	0.662 mg/l
Application Route	:	Inhalation
Exposure time	:	13 w
Dose	:	0, 0.033, 0.165, 0.662 mg/L
Symptoms	:	respiratory tract irritation

Aspiration toxicity

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

Product:

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

Components:

Chlorantraniliprole:

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 (Lepomis macrochirus (Bluegill sunfish)): > 5.6 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.0073 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): > 7.4 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC (Raphidocelis subcapitata (freshwater green alga)): 3.5 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): > 1,000 mg/kg
Exposure time: 14 d
Method: OECD Test Guideline 207
GLP: yes

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

Method: OECD Test Guideline 217
Remarks: No significant adverse effect on carbon mineralization.

Toxicity to terrestrial organisms : LD50 (Apis mellifera (bees)): > 334 µg/bee
Exposure time: 48 h
End point: Acute oral toxicity
Method: OECD Test Guideline 213
GLP: yes

LD50 (Apis mellifera (bees)): > 313 µg/bee
Exposure time: 48 h
End point: Acute contact toxicity
Method: OECD Test Guideline 214

GLP: yes

LD50 (Colinus virginianus (Bobwhite quail)): > 4,179 mg/kg
End point: Acute oral toxicity
Method: OECD Test Guideline 223
GLP: yes

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Components:

Chlorantraniliprole:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 13.8 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
Remarks: Information source: Internal study report

LC50 (Lepomis macrochirus (Bluegill sunfish)): > 15.1 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes
Remarks: Information source: Internal study report

LC50 (Cyprinodon sp. (minnow)): > 12 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : LC50 (Hyalella azteca (Amphipod)): 0.26 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes

LC50 (Ceriodaphnia dubia (water flea)): 0.0067 - 0.011 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 2 mg/l
Exposure time: 120 h

NOEC (Lemna gibba (duckweed)): > 2 mg/l
End point: Biomass
Exposure time: 14 d
Test Type: static test

ErC50 (Selenastrum capricornutum (green algae)): > 2 mg/l
Exposure time: 72 h

NOEC (Anabaena flos-aquae (cyanobacterium)): > 2 mg/l
End point: Growth rate
Exposure time: 120 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes

NOEC (Skeletonema costatum (Diatom)): > 14.6 mg/l
End point: Growth rate
Exposure time: 120 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes

NOEC (Navicula pelliculosa (Diatom)): > 15.1 mg/l
End point: Growth rate
Exposure time: 120 h
Test Type: static test
Method: OECD Test Guideline 201
GLP: yes

Toxicity to fish (Chronic toxicity) : NOEC (Cyprinodon variegatus (sheepshead minnow)): 1.28 mg/l
Exposure time: 36 d

NOEC (Oncorhynchus mykiss (rainbow trout)): 0.110 mg/l
Exposure time: 28 d
Method: OECD Test Guideline 210
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.00447 mg/l
Exposure time: 21 d
Method: US EPA Test Guideline OPPTS 850.1300
GLP: yes

Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): > 1,000 mg/kg
Exposure time: 14 d
Method: OECD Test Guideline 207
GLP: yes

Toxicity to terrestrial organisms : LD50 (Apis mellifera (bees)): > 4.0 µg/bee
Exposure time: 72 h
End point: Acute contact toxicity
Remarks: Active substance dissolved in acetone

LD50 (Apis mellifera (bees)): > 0.005 µg/bee
Exposure time: 48 h
End point: Acute contact toxicity
Remarks: Active substance dissolved in water

LD50 (Apis mellifera (bees)): > 104.1 µg/bee
Exposure time: 48 h
End point: Acute oral toxicity
Remarks: Active substance dissolved in acetone

LD50 (Apis mellifera (bees)): > 0.0274 µg/bee
Exposure time: 48 h
End point: Acute oral toxicity
Remarks: Active substance dissolved in water

LD50 (Poephila guttata (zebra finch)): > 2,250 mg/kg

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 aquatic invertebrates	:	(Mysidopsis bahia (opossum shrimp)): 18,800 mg/l 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

glycerol:

Toxicity to fish	:	LC50 (Fish): 885 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 1,955 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Scenedesmus capricornutum (fresh water algae)): 2,900 mg/l Exposure time: 192 h
Toxicity to microorganisms	:	EC10 (Pseudomonas putida): 10,000 mg/l Exposure time: 16 h

Alkylnaphthalenesulfonic acid, polymer with formaldehyde, sodium salt:

Toxicity to fish	:	LC50 (Zebra fish): > 10 - 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Based on data from similar materials EC10 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	EC10 (Daphnia magna (Water flea)): > 10 - 100 mg/l Exposure time: 21 d Method: OECD Test Guideline 211 Remarks: Based on data from similar materials

Persistence and degradability

Product:

Biodegradability	:	Remarks: Product contains minor amounts of not readily biodegradable components, which may not be degradable in waste water treatment plants.

Components:

Chlorantraniliprole:

Biodegradability	:	Result: Not readily biodegradable.
Stability in water	:	Degradation half life (DT50): 10 d (25 °C) pH: 9 Degradation half life (DT50): 0.3 d (50 °C) pH: 9 Degradation half life (DT50): > 31 d pH: 5

propane-1,2-diol:

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

glycerol:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 94 % Exposure time: 24 h

Alkylnaphthalenesulfonic acid, polymer with formaldehyde, sodium salt:

Biodegradability	:	Result: Not readily biodegradable. Remarks: Based on data from similar materials

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data is available on the product itself.

Remarks: No data available

Components:

Chlorantraniliprole:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): 14
Method: OECD Test Guideline 305
GLP: yes
Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 2.77 (20 °C)
pH: 4

log Pow: 2.86 (20 °C)
pH: 7

log Pow: 2.80 (20 °C)
pH: 9

propane-1,2-diol:

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

glycerol:

Partition coefficient: n-octanol/water : log Pow: -1.75 (25 °C)
pH: 7.4

Mobility in soil

Product:

Distribution among environmental compartments : Remarks: No data is available on the product itself.

Components:

Chlorantraniliprole:

Distribution among environmental compartments : Koc: 362 ml/g, log Koc: 2.55
Remarks: Mobile in soils

Stability in soil : Remarks: Very persistent 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. Do not re-use empty containers. Packaging that is not properly emptied must be disposed of as the unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

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

IATA-DGR

UN/ID No.	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (Chlorantraniliprole)
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. (Chlorantraniliprole)

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. (Chlorantraniliprole)
Class	:	9
Packing group	:	III
Labels	:	9
Hazchem Code	:	•3Z
Environmentally hazardous	:	yes
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

Therapeutic Goods (Poisons Standard) Instrument	:	No poison schedule number allocated (Please use the original publication to check for specific uses, specific conditions or threshold limits that might apply for this chemical)

APVMA Code: 89966

Prohibition/Licensing Requirements	:	There is no applicable prohibition, authorisation and restricted use 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	:	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 chemical substance(s) exempt from CEPA DSL Inventory requirements. It is regulated as a pesticide subject to Pest Control Products Act (PCPA) requirements. Read the PCPA label, authorized under the Pest Control Products Act, prior to using or handling this pest control product.
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
TECI	:	Not in compliance with the inventory

SECTION 16: ANY OTHER RELEVANT INFORMATION

Revision Date	:	23.09.2024
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 Sys-

tem; 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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