SAFETY DATA SHEET

VANTACOR®

Version	Revision Date:	SDS Number:	Date of last issue: -
2.0	06.06.2025	50002517	Date of first issue: 06.06.2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : VANTACOR®

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
TELEFONE: (19) 2042.4500

Emergency telephone : Brazil: 0800 34 35 450 (24 hours)
+55-2139581449 (CHEMTREC)

Medical Emergency Number : 0800 7010 450

Recommended use of the chemical and restrictions on use

Recommended use : Insecticide

Restrictions on use : Use as recommended by the label.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification in accordance with ABNT NBR 14725 Standard

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 1

GHS label elements in accordance with ABNT NBR 14725 Standard

Hazard pictograms :

Signal Word : WARNING

Hazard Statements : H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements :

Prevention:

P273 Avoid release to the environment.

Response:

P391 Collect spillage.

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

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
Chlorantraniliprole	500008-45-7	Acute Tox. (Oral), 5 Acute Tox. (Dermal), 5 Aquatic Acute, 1 Aquatic Chronic, 1	>= 30 -< 50
Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts	68425-94-5	Serious eye damage/eye irritation, 2A Aquatic Acute, 3 Aquatic Chronic, 3	>= 1 -< 2,5
2,4,7,9-tetramethyldec-5-yne-4,7-diol	126-86-3	Acute Tox. (Dermal), 5 Serious eye damage/eye irritation, 1 Skin Sens., 1B STOT SE, (Respiratory system) , 3 Aquatic Acute, 3 Aquatic Chronic, 3	>= 0,25 -< 1

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this material 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 : Wash off with soap and water.
If symptoms persist, call a physician.
Wash contaminated clothing before re-use.

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. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Dry chemical, CO2, water spray or regular foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	:	Do not spread spilled material with high-pressure water streams. 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 Sulfur 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 fire-fighters	:	Firefighters should wear protective clothing and self-contained breathing apparatus.

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.
Accidental Release Measures	:	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 absorbent material. Pick up and transfer to properly labeled 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 vapors/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

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 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

Physical state	:	liquid
Color	:	off-white
Odor	:	mild aromatic
Odor 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	:	Method: Pensky-Martens closed cup - PMCC No flash up to boiling point.
Evaporation rate	:	No data available
Flammability (liquids)	:	Not expected to be ignitable
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	Not available for this mixture.
Relative vapor density	:	No data available
Relative density	:	ca. 1,26 (20 °C) Method: Regulation (EC) No. 440/2008, Annex, A.3
Density	:	ca. 1,26 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	No data available
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	Not applicable

Autoignition temperature	:	> 600 °C Method: EEC A.15
Decomposition temperature	:	Thermal decomposition can lead to release of irritating gases and vapors.
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. 0,04 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

Information on likely routes of exposure	:	Skin contact

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

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

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

2,4,7,9-tetramethyldec-5-yne-4,7-diol:

Acute oral toxicity : LD50 (Rat, male): 12.900 mg/kg

Acute inhalation toxicity : LC0 (Rat, male and female): 1.000 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist
Symptoms: Irritation
Remarks: no mortality

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation

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

Product:

Species : Rabbit
Assessment : Not classified as irritant

Method : OECD Test Guideline 404
Result : slight or no skin irritation.
GLP : yes

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

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

Remarks : No data available

2,4,7,9-tetramethyldec-5-yne-4,7-diol:

Species : Rabbit
Method : OECD Test Guideline 404
Result : slight irritation

Serious eye damage/eye irritation

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

Product:

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

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

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

Result : Eye irritation

2,4,7,9-tetramethyldec-5-yne-4,7-diol:

Species : Rabbit
Result : Irreversible effects on the eye

Respiratory or skin sensitization

Skin sensitization

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

Respiratory sensitization

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

Product:

Test Type : Local lymph node assay (LLNA)
Species : mice
Assessment : Did not cause sensitization on laboratory animals.
Method : OECD Test Guideline 429
GLP : yes

Components:

Chlorantraniliprole:

Test Type : Maximization Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitization.
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 sensitization.

2,4,7,9-tetramethyldec-5-yne-4,7-diol:

Test Type : Local lymph node assay (LLNA)
Routes of exposure : Skin contact
Species : Mouse
Method : OECD Test Guideline 429

Result : Probability or evidence of low to moderate skin sensitization rate in humans

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.

2,4,7,9-tetramethyldec-5-yne-4,7-diol:

Genotoxicity in vitro : Test Type: gene mutation test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
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
Species	:	Dog
Exposure time	:	1 Years
NOAEL	:	1.164 mg/kg bw/day
Result	:	negative
Carcinogenicity - Assessment	:	Animal testing did not show any carcinogenic effects.

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 fetal 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

2,4,7,9-tetramethyldec-5-yne-4,7-diol:

Effects on fertility	:	Test Type: reproductive and developmental toxicity study Species: Rat, male and female Result: negative
Effects on fetal development	:	Test Type: reproductive and developmental toxicity study Species: Rat

Application Route: Ingestion
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.

2,4,7,9-tetramethyldec-5-yne-4,7-diol:

Assessment : May cause respiratory irritation.

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

2,4,7,9-tetramethyldec-5-yne-4,7-diol:

Species	:	Rat, male and female
NOAEL	:	150 mg/kg
Application Route	:	Ingestion
Exposure time	:	30 d
Method	:	OECD Test Guideline 408

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)): > 21 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)): 0,015 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae/aquatic plants	:	ErC50 (Raphidocelis subcapitata (freshwater green alga)): > 16 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Raphidocelis subcapitata (freshwater green alga)): 7,9 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 LOEC (Raphidocelis subcapitata (freshwater green alga)): 16 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	:	EC50 (Daphnia magna (Water flea)): 0,0116 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202 GLP: yes 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

M-Factor (Acute aquatic toxicity) : 10

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

M-Factor (Chronic aquatic toxicity) : 10

Toxicity to soil dwelling organisms	:	LC50 (Eisenia fetida (earthworms)): > 1.000 mg/kg Exposure time: 14 d Method: OECD Test Guideline 207 GLP: yes Remarks: No significant adverse effect on Nitrogen mineralization. No significant adverse effect on Carbon mineralization. NOEC (Hypoaspis aculeifer): 100 mg/kg dry weight (d.w.) Exposure time: 16 d Method: OECD Test Guideline 207 EC50 (Hypoaspis aculeifer): >100 mg/kg dry weight (d.w.) Exposure time: 16 d Method: OECD Test Guideline 207
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

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

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

2,4,7,9-tetramethyldec-5-yne-4,7-diol:

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 42 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 91 mg/l
Exposure time: 48 h
Test Type: Immobilization

Toxicity to microorganisms : EC50 (activated sludge): 680 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition

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

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

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

2,4,7,9-tetramethyldec-5-yne-4,7-diol:

Biodegradability : Result: Not readily biodegradable.

Biodegradation: 5 %
Exposure time: 28 d

Bioaccumulative potential

Product:

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

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

2,4,7,9-tetramethyldec-5-yne-4,7-diol:

Bioaccumulation : Bioconcentration factor (BCF): 24
Remarks: Substance is not very persistent and very bioaccumulative (vPvB).

Partition coefficient: n-octanol/water : log Pow: 2,8 (22 °C)

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 infor- : An environmental hazard cannot be excluded in the event of

mation

unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

Components:

Chlorantraniliprole:

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

Empty remaining contents.
Triple rinse containers.
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

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. (Chlorantraniliprole)
Class	:	9
Packing group	:	III
Labels	:	9
Hazard Identification Number	:	90

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. 14,785 of December 27, 2023. Decree 4,074 of January 4, 2002 and its regulatory standards. ANTT Resolution No. 5,998/22 of November 3, 2022. This MSDS was prepared in accordance with the criteria of ABNT NBR 14725. The user is recommended to pay attention to local regulations.
National List of Carcinogenic Agents for Humans - (LINACH)

Group 2B: Possibly carcinogenic to humans
Palygorskite 12174-11-7

Brazil. List of chemicals controlled by the Federal Police : 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 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. OTHER INFORMATION

Revision Date : 06.06.2025

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; 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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