SAFETY DATA SHEET

Couraze 200 SC Insecticide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	23.01.2024	50001552	Date of first issue: 23.01.2024

SECTION 1: Identification of the hazardous chemical and of the supplier

Product identifier

Product name : Couraze 200 SC Insecticide

Other means of identification : IMIDACLOPRID 200 G/L SC

Recommended use of the chemical and restrictions on use

Recommended use : Can be used as insecticide only.

Restrictions on use : Use as recommended by the label.

Manufacturer or supplier's details

Principal Supplier : FMC Corporation
2929 WALNUT ST
PHILADELPHIA PA 19104
USA
(215) 299-6000
SDS-Info@fmc.com

Local registrant : FMC Chemicals (Malaysia) Sdn Bhd
Level 16, 1 Sentral, Jalan Stesen Sentral 5, Kuala Lumpur Sentral
50470, Kuala Lumpur, Malaysia
Phone No: +60320929423
Fax No: +603-2092 9201

Emergency telephone : For leak, fire, spill or accident emergencies, call:
CHEMTREC (Asia-Pacific Regional Number): +65 3163 8374

Medical emergency:
All other countries: +1 651 / 632-6793 (Collect)
1 703 / 741-5970 (CHEMTREC - International)

SECTION 2: Hazards identification

Classification of the hazardous chemical

Acute toxicity (Oral) : Category 4

Serious eye damage/eye irritation : Category 2

Hazardous to the aquatic environment - acute hazard : Category 1

Hazardous to the aquatic environment - chronic hazard : Category 1

Label elements

Hazard pictograms :

Signal Word : Warning

Hazard Statements : H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements :

Prevention:

P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.

Response:

P337 + P313 If eye irritation persists: Get medical advice/ attention.
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 and information of the ingredients of the hazardous chemical

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
imidacloprid (ISO)	138261-41-3	>= 10 -< 25
glycerol	56-81-5	>= 5 -< 10
docusate sodium	577-11-7	>= 1 -< 3
1,2-benzisothiazol-3(2H)-one	2634-33-5	>= 0.0025 -< 0.025

SECTION 4: First aid measures

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

If inhaled : If unconscious, place in recovery position and seek medical advice.

If symptoms persist, call a physician.

In case of skin contact	:	If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	:	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Clean mouth with water and drink afterwards plenty of water. 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.
Most important symptoms and effects, both acute and delayed	:	Harmful if swallowed. Causes serious eye irritation.
Notes to physician	:	Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media	:	Carbon dioxide (CO2) Dry chemical Foam
Unsuitable extinguishing media	:	High volume water jet

Physicochemical hazards arising from the chemical

Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Thermal decomposition can lead to release of irritating gases and vapors. Halogenated compounds Carbon oxides Nitrogen oxides (NOx)

Special protective equipment and precautions for fire-fighters

Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.
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.

Hazchem Code : •3Z

SECTION 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.

SECTION 7: Handling and storage

Handling

Precautions for safe handling

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.

Storage

Conditions for safe storage, including any incompatibilities

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 stability : No decomposition if stored and applied as directed.

SECTION 8: Exposure controls and personal protection

Control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
glycerol	56-81-5	TWA (Mist)	10 mg/m3	MY PEL

Individual protection measures, such as personal protective equipment

Eye/face protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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.

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9: Physical and chemical properties

Physical state : liquid

Form : suspension

Color : off-white

Odor : odorless

Odor Threshold : No data available

pH : 7 (25 °C)
(1% solution in water)

Evaporation rate : No data available

Self-ignition : does not ignite

Relative density : 1.12 (20 °C)

Solubility(ies)		
Water solubility	:	completely soluble
Partition coefficient: n-octanol/water	:	log Pow: 0.57 Active ingredient
Viscosity		
Viscosity, dynamic	:	15,900 mPa.s (40 °C) 11,100 mPa.s (20 °C)
Explosive properties	:	Not explosive
Oxidizing properties	:	Non-oxidizing

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

SECTION 11: Toxicological information

Information on likely routes of exposure : None known.

Acute toxicity

Harmful if swallowed.

Product:

Acute oral toxicity : Acute toxicity estimate: 748.45 mg/kg
Method: Calculation method

Components:

imidacloprid (ISO):

Acute oral toxicity : LD50 (Rat, male and female): > 1,000 mg/kg
Symptoms: Tremors, piloerection, Breathing difficulties
Remarks: no mortality

LD50 (Rat, female): 300 - 2,000 mg/kg
Method: OECD Test Guideline 423
Symptoms: Fatality, Convulsions, piloerection
GLP: yes
Assessment: The component/mixture is moderately toxic after single ingestion.

LD50 (Rat, female): 300 - 2,000 mg/kg
Method: OECD Test Guideline 420
Symptoms: Fatality, Tremors, ataxia
GLP: yes
Assessment: The component/mixture is moderately toxic after single ingestion.

LD50 (Rat, female): ca. 2,567 mg/kg
Method: OECD Test Guideline 425
Symptoms: Fatality, Breathing difficulties
GLP: yes

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.31 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: no mortality

LC50 (Rat, male and female): 5.17 mg/l
Exposure time: 4 h
Method: OECD Test Guideline 403
Symptoms: hypoactivity
GLP: yes
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: no mortality

LC50 (Rat, male and female): > 4.9 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Symptoms: Breathing difficulties, ataxia, Convulsions, Tremors
Assessment: The component/mixture is minimally toxic after short term inhalation.

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
Symptoms: Irritation
GLP: yes
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: no mortality

LD50 (Rabbit): > 2,000 mg/kg

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

docusate sodium:

Acute oral toxicity : LD50 (Rat, male and female): > 2,100 mg/kg
Method: OECD Test Guideline 401
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50 (Rabbit, male): > 10,000 mg/kg
Method: OECD Test Guideline 402

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

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

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks : May cause skin irritation and/or dermatitis.

Components:

imidacloprid (ISO):

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

glycerol:

Species : Rabbit
Result : No skin irritation

docusate sodium:

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

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

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

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks	:	May cause irreversible eye damage.

Components:

imidacloprid (ISO):

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

glycerol:

Species	:	Rabbit
Result	:	No eye irritation

docusate sodium:

Species	:	Rabbit
Result	:	Risk of serious damage to eyes.
Method	:	OECD Test Guideline 405

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

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

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

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Components:

imidacloprid (ISO):

Test Type	:	Maximization Test
Species	:	Guinea pig
Result	:	Does not cause skin sensitization.

Test Type	:	Local lymph node assay (LLNA)
Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	Does not cause skin sensitization.
GLP	:	yes

docusate sodium:

Routes of exposure	:	Skin contact
Species	:	Humans
Result	:	Does not cause skin sensitization.

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

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

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

Germ cell mutagenicity

Not classified based on available information.

Components:

imidacloprid (ISO):

Genotoxicity in vitro	:	Test Type: Chromosome aberration test in vitro Test system: Chinese hamster cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: yes Test Type: Ames test Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: Ames test Metabolic activation: with and without metabolic activation Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay) Result: negative GLP: yes
Genotoxicity in vivo	:	Test Type: Cytogenetic assay Species: Chinese hamster Result: negative GLP: yes

Test Type: Micronucleus test
Species: Mouse
Method: OECD Test Guideline 474
Result: negative
GLP: yes

Test Type: dominant lethal test
Species: Mouse
Result: negative

Test Type: chromosome aberration assay
Species: Mouse
Result: negative

Germ cell mutagenicity - Assessment : Based on available data, the classification criteria are not met.

glycerol:

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

docusate sodium:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

Genotoxicity in vivo : Remarks: No data available

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

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

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

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

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

Test Type: Micronucleus test

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

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

Carcinogenicity

Not classified based on available information.

Components:

imidacloprid (ISO):

Carcinogenicity - Assessment : Based on available data, the classification criteria are not met.

glycerol:

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

Reproductive toxicity

Not classified based on available information.

Components:

imidacloprid (ISO):

Effects on fertility : Method: OECD Test Guideline 416
Result: Animal testing did not show any effects on fertility.

Method: OECD Test Guideline 416
Result: No effects on fertility and early embryonic development were detected.

Effects on fetal development : Species: Rabbit
Application Route: Oral
Dose: 0, 8, 24, 72 mg/kg bw/day
General Toxicity Maternal: NOAEL: 8 mg/kg bw/day
Method: OECD Test Guideline 414
Result: No teratogenic effects.
GLP: yes

Species: Rat
Dose: 0, 10, 30, 100 mg/kg bw/day
General Toxicity Maternal: NOEL: 10 mg/kg bw/day
Embryo-fetal toxicity.: NOEL: 30 mg/kg bw/day
Method: OECD Test Guideline 414
GLP: yes

Test Type: Multi-generation study
Species: Rat
Application Route: Oral

Dose: 8, 20, 56 mg/kg bw/day
General Toxicity Maternal: NOEL: 20 mg/kg body weight
Developmental Toxicity: NOEL: 20 mg/kg body weight
Result: No teratogenic effects.
GLP: yes

Reproductive toxicity - Assessment : Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.

glycerol:

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

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

docusate sodium:

Effects on fertility : Test Type: reproductive and developmental toxicity study
Species: Rat, male and female
Application Route: Ingestion
Method: OECD Test Guideline 416
Result: negative

Effects on fetal development : Test Type: reproductive and developmental toxicity study
Species: Rat
Duration of Single Treatment: 6 - 15 d
Method: OECD Test Guideline 414
Result: Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses

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

Effects on fertility : Species: Rat, male
Application Route: Ingestion
General Toxicity Parent: NOAEL: 18.5 mg/kg body weight
General Toxicity F1: NOAEL: 48 mg/kg body weight
Fertility: NOAEL: 112 mg/kg bw/day
Symptoms: No effects on reproduction parameters.
Method: OPPTS 870.3800
Result: negative

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

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Components:

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

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

Repeated dose toxicity

Components:

imidacloprid (ISO):

Species : Dog
NOEL : 1200 ppm
Application Route : Oral - feed
Exposure time : 90 d
Method : OECD Test Guideline 409
GLP : yes

Species : Dog
LOAEL : 49 mg/kg
Application Route : Oral - feed
Exposure time : 28 d
Dose : 0, 7.3, 31, 49 mg/kg bw/day
Method : OECD Test Guideline 409
Symptoms : Tremors, ataxia, Vomiting

Species : Dog, male and female
NOEL : 72 mg/kg bw/day
Application Route : Oral - feed
Exposure time : 52 w
Dose : 0, 6.1, 15, 41, 72 mg/kg bw/day
GLP : yes

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

docusate sodium:

Species : Rat, male and female
NOAEL : 750 mg/kg
Application Route : Oral

Exposure time : 90 d
Method : OECD Test Guideline 408

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

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

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

Aspiration toxicity

Not classified based on available information.

Components:

imidacloprid (ISO):

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

Further information

Product:

Remarks : No data available

Components:

imidacloprid (ISO):

Remarks : No data available

SECTION 12: Ecological information

Ecotoxicity

Components:

imidacloprid (ISO):

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): > 105 mg/l
Exposure time: 96 h
Test Type: static test
Method: EPA OPP 72-1
GLP: yes

LC50 (Salmo gairdneri): 158 - 281 mg/l
Exposure time: 96 h
Test Type: static test

Method: OECD Test Guideline 203
GLP: yes

LC50 (Oncorhynchus mykiss (rainbow trout)): > 83 mg/l
Exposure time: 96 h
Test Type: static test
Method: EPA OPP 72-1
GLP: yes

LC50 (Cyprinodon variegatus (sheepshead minnow)): 161 mg/l
Exposure time: 96 h
Test Type: static test
GLP: yes

LC50 (Leuciscus idus (Golden orfe)): 178 - 316 mg/l
Exposure time: 96 h
Test Type: static test
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 85 mg/l
Exposure time: 48 h
Method: US EPA Test Guideline OPP 72-2
GLP: yes

EC50 (Americamysis bahia (mysid shrimp)): 0.0341 mg/l
Exposure time: 48 h

LC50 (Hyalella azteca (Amphipod)): 0.526 mg/l
Exposure time: 96 h
Method: US EPA Test Guideline OPP 72-2
GLP: yes

NOEC (Crassostrea virginica (atlantic oyster)): 23.3 mg/l
Exposure time: 96 h
Method: US EPA Test Guideline OPP 72-3
GLP: yes

Toxicity to algae/aquatic plants : EbC50 (Scenedesmus subspicatus): > 10 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes

NOEC (Selenastrum capricornutum (green algae)): 119 mg/l
Exposure time: 5 d
GLP: yes

M-Factor (Acute aquatic toxicity) : 10

Toxicity to fish (Chronic toxicity) : NOEC (Salmo gairdneri): 28.5 mg/l
Exposure time: 21 d

NOEC (Oncorhynchus mykiss (rainbow trout)): 1.2 mg/l
End point: Growth
Exposure time: 98 d
Method: US EPA Test Guideline OPP 72-4
GLP: yes

NOEC (Oncorhynchus mykiss (rainbow trout)): 9.02 mg/l
End point: Hatching success
Test Type: flow-through test
Method: OECD Test Guideline 210
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 1.8 mg/l
Exposure time: 21 d
Test Type: semi-static test
Method: US EPA Test Guideline OPP 72-4
GLP: yes

EC10 (Chironomus riparius (harlequin fly)): 0.00209 mg/l
Exposure time: 28 d

NOEC (Chironomus tentans): 0.67 µg/l
End point: Growth
Exposure time: 10 d
Test Type: Static renewal test
GLP: yes

M-Factor (Chronic aquatic toxicity) : 100

Toxicity to microorganisms : IC50 (activated sludge): > 10000

Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): 10.7 mg/kg dry weight (d.w.)
Exposure time: 14 d

Toxicity to terrestrial organisms : LD50 (Coturnix japonica (Japanese quail)): 31 mg/kg

LD50 (Coturnix japonica (Japanese quail)): 2,225 ppm
Exposure time: 5 d

LD50 (Apis mellifera (bees)): 0.0037 µg/bee
Exposure time: 48 h
End point: Acute oral toxicity

LD50 (Apis mellifera (bees)): 8.1
Exposure time: 48 h

Ecotoxicology Assessment

Other organisms relevant to the environment : Harmful to bees.

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

docusate sodium:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 49 mg/l Exposure time: 96 h Method: Regulation (EC) No. 440/2008, Annex, C.1
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 15.2 mg/l Exposure time: 48 h Method: Regulation (EC) No. 440/2008, Annex, C.2
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): 82.5 mg/l Exposure time: 72 h Method: Regulation (EC) No. 440/2008, Annex, C.3
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	EC10 (Daphnia magna (Water flea)): 9 mg/l Exposure time: 21 d Method: OECD Test Guideline 211
Toxicity to microorganisms	:	EC50 (Pseudomonas putida): 164 mg/l Exposure time: 16.5 h Method: DIN 38 412 Part 8 EC10 (Pseudomonas putida): 122 mg/l Exposure time: 16.5 h

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

Toxicity to fish	:	LC50 (Cyprinodon variegatus (sheepshead minnow)): 16.7 mg/l Exposure time: 96 h Test Type: static test LC50 (Oncorhynchus mykiss (rainbow trout)): 2.15 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 2.9 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 0.070 mg/l

Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.04 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 10

Toxicity to microorganisms : EC50 (activated sludge): 24 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition
Method: OECD Test Guideline 209

EC50 (activated sludge): 12.8 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition
Method: OECD Test Guideline 209

Persistence and degradability

Components:

imidacloprid (ISO):

Biodegradability : Result: Not readily biodegradable.

glycerol:

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

docusate sodium:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 91 %
Exposure time: 28 d

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

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

Bioaccumulative potential

Components:

imidacloprid (ISO):

Bioaccumulation : Remarks: Low potential for bioaccumulation

Partition coefficient: n-octanol/water : log Pow: 0.33 (20 °C)
Method: OECD Test Guideline 107

glycerol:

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

docusate sodium:

Bioaccumulation : Remarks: Not applicable

Partition coefficient: n-octanol/water : log Pow: 1.998 (20 °C)

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

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): 6.62
Exposure time: 56 d
Method: OECD Test Guideline 305
Remarks: This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Partition coefficient: n-octanol/water : log Pow: 0.7 (20 °C)
pH: 7

log Pow: 0.99 (20 °C)
pH: 5

Mobility in soil

Components:

imidacloprid (ISO):

Distribution among environmental compartments : Koc: 109 - 411
Remarks: Mobile in soils

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

Distribution among environmental compartments : Koc: 9.33 ml/g, log Koc: 0.97
Method: OECD Test Guideline 121
Remarks: Highly mobile in soils

Other adverse effects

Product:

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

Components:

imidacloprid (ISO):

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 information

Disposal methods

Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated packaging	:	Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport information

International Regulations

UNRTDG

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

IATA-DGR

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

Hazchem Code	:	•3Z

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 specific for the hazardous chemical

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013.
Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

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. imidacloprid (ISO)
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
NZIoC	:	Not in compliance with the inventory

SECTION 16: Other information

Revision Date	:	23.01.2024
Date format	:	dd.mm.yyyy

Full text of other abbreviations

MY PEL	:	Malaysia. Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.
MY PEL / TWA	:	Eight-hour time-weighted average airborne concentration

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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