

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

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Version 1.0	Revision Date: 15.05.2025	SDS Number: 50002634	Date of last issue: - Date of first issue: 15.05.2025
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### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : TIRRACTO

Other means of identification : Chlorantraniliprole + Clothianidin (15.75 + 26.25) SC

#### Manufacturer or supplier's details

Company : FMC India Private Limited

Address : TCG Financial Centre, 2nd Floor, C-53,  
Bandra Kurla Complex,  
Bandra (E), Mumbai, Maharashtra-400098  
India

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

Emergency telephone : 022 6704 5504/5404  
000-800-100-7141 (CHEMTREC)

Medical Emergency Number : 022 6704 5504/5404

#### 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.

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### 2. HAZARDS IDENTIFICATION

#### Manufacture, Storage and Import of Hazardous Chemicals Rules 1989

##### Classification

Not classified as hazardous according to criteria laid down in Part I of Schedule-1.

##### GHS Classification

Acute toxicity (Oral) : Category 5

Acute toxicity (Dermal) : Category 5

Short-term (acute) aquatic hazard : Category 3

Long-term (chronic) aquatic hazard : Category 1

## TIRRACTO

Version 1.0 Revision Date: 15.05.2025 SDS Number: 50002634 Date of last issue: - Date of first issue: 15.05.2025

---

### GHS label elements

Hazard pictograms :



Signal Word :

WARNING

Hazard Statements :

H303 + H313 May be harmful if swallowed or in contact with skin.  
H402 Harmful to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements :

**Prevention:**

P273 Avoid release to the environment.

**Response:**

P301 + P317 IF SWALLOWED: Get medical help.  
P302 + P352 + P317 IF ON SKIN: Wash with plenty of water.  
Get medical help.  
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.

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture :

Mixture

### Components

Chemical name	CAS-No.	Concentration (% w/w)
clothianidin (ISO)	210880-92-5	>= 25 - < 30
Chlorantraniliprole	500008-45-7	>= 10 - < 20
Aqueous solution of a modified polymer with pigment affinitive groups	Not Assigned	>= 1 - < 10
Alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9	>= 1 - < 2.5

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## 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 :

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

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version  
1.0

Revision Date:  
15.05.2025

SDS Number:  
50002634

Date of last issue: -  
Date of first issue: 15.05.2025

---

If symptoms persist, call a physician.

In case of skin contact : Wash off with soap and water.  
Call a physician if irritation develops or 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 : 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 : May be harmful if swallowed or in contact with skin.

Notes to physician : Treat symptomatically.

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## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry chemical, CO<sub>2</sub>, water spray or regular foam.

Unsuitable extinguishing media : High volume water jet  
Do not spread spilled material with high-pressure water streams.

Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Nitrogen oxides (NO<sub>x</sub>)  
Carbon oxides  
Hydrogen cyanide  
Sulphuric acid  
Sulfur oxides  
Bromine compounds  
Chlorinated compounds

Specific extinguishing methods : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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

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## 6. ACCIDENTAL RELEASE MEASURES

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version  
1.0

Revision Date:  
15.05.2025

SDS Number:  
50002634

Date of last issue: -  
Date of first issue: 15.05.2025

---

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.

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.

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## 7. HANDLING AND STORAGE

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

Advice on safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Electrical installations / working materials must comply with the technological safety standards.

Further information on storage stability : No decomposition if stored and applied as directed.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
clothianidin (ISO)	210880-92-5	TWA (Inhalable particulate matter)	0.1 mg/m <sup>3</sup>	ACGIH

### Personal protective equipment

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

Hand protection

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

---

Version 1.0	Revision Date: 15.05.2025	SDS Number: 50002634	Date of last issue: - Date of first issue: 15.05.2025
----------------	------------------------------	-------------------------	--

---

Material	: Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.
Remarks	: The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	: Eye wash bottle with pure water Tightly fitting safety goggles
Skin and body protection	: Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	: Wash hands before breaks and at the end of workday.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid
Form	: viscous liquid
Color	: off-white
Odor	: mild aromatic
pH	: 6.63 Concentration: 1 % (aqueous suspension)
Melting point/freezing point	: not determined
Boiling point/boiling range	: not determined
Flash point	: not determined
Density	: 1.1964 g/cm <sup>3</sup>
Partition coefficient: n-octanol/water	: No data available
Viscosity	
Viscosity, dynamic	: 2,330 mPa.s
Viscosity, kinematic	: not determined
Explosive properties	: Not explosive

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version  
1.0

Revision Date:  
15.05.2025

SDS Number:  
50002634

Date of last issue: -  
Date of first issue: 15.05.2025

---

Oxidizing properties : Non-oxidizing

## 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : No decomposition if stored and applied as directed.

Conditions to avoid : Protect from frost, heat and sunlight.

Incompatible materials : Strong oxidizing agents  
Strong acids and strong bases

Hazardous decomposition products : Nitrogen oxides (NOx)  
Carbon oxides  
Bromine compounds  
Chlorine compounds

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

May be harmful if swallowed or in contact with skin.

### Product:

Acute oral toxicity : LD50(Rat, female): > 2,000 mg/kg  
Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50(Rat, male and female): > 3.29 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50(Rat, female): > 2,000 mg/kg  
Method: OECD Test Guideline 402

### Components:

#### **clothianidin (ISO):**

Acute oral toxicity : LD50 (Mouse, male and female): 389 - 465 mg/kg  
Method: OECD Test Guideline 401

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version 1.0	Revision Date: 15.05.2025	SDS Number: 50002634	Date of last issue: - Date of first issue: 15.05.2025
----------------	------------------------------	-------------------------	--

Acute inhalation toxicity : LC50 (Rat): > 5.54 mg/l  
Exposure time: 4.5 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403

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

### **Chlorantraniliprole:**

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

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

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

### **Aqueous solution of a modified polymer with pigment affinitive groups:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 423

### **Alcohols, C11-14-iso-, C13-rich, ethoxylated:**

Acute oral toxicity : LD50 (Rat): 500 - 2,000 mg/kg  
Remarks: Based on data from similar materials

### **Skin corrosion/irritation**

Not classified based on available information.

### **Product:**

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

### **Components:**

#### **clothianidin (ISO):**

Species : Rabbit  
Method : OECD Test Guideline 404

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version 1.0	Revision Date: 15.05.2025	SDS Number: 50002634	Date of last issue: - Date of first issue: 15.05.2025
----------------	------------------------------	-------------------------	--

Result : No skin irritation

### **Chlorantraniliprole:**

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

### **Alcohols, C11-14-iso-, C13-rich, ethoxylated:**

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

### **Serious eye damage/eye irritation**

Not classified based on available information.

### **Product:**

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

### **Components:**

#### **clothianidin (ISO):**

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

#### **Chlorantraniliprole:**

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

### **Alcohols, C11-14-iso-, C13-rich, ethoxylated:**

Species : Rabbit  
Result : Irreversible effects on the eye

### **Respiratory or skin sensitization**

#### **Skin sensitization**

Not classified based on available information.

#### **Respiratory sensitization**

Not classified based on available information.

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version  
1.0

Revision Date:  
15.05.2025

SDS Number:  
50002634

Date of last issue: -  
Date of first issue: 15.05.2025

---

### **Product:**

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

### **Components:**

#### **clothianidin (ISO):**

Test Type : Maximization Test  
Species : Guinea pig  
Method : OECD Test Guideline 406  
Result : Not a skin sensitizer.

#### **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.

#### **Alcohols, C11-14-iso-, C13-rich, ethoxylated:**

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

### **Germ cell mutagenicity**

Not classified based on available information.

### **Components:**

#### **clothianidin (ISO):**

Genotoxicity in vitro : Test Type: reverse mutation assay  
Test system: *Salmonella typhimurium*  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: negative

Test Type: Chromosome aberration test in vitro  
Test system: Chinese hamster fibroblasts  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 473  
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version  
1.0

Revision Date:  
15.05.2025

SDS Number:  
50002634

Date of last issue: -  
Date of first issue: 15.05.2025

---

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

Test Type: comet assay  
Species: Rat  
Application Route: Oral  
Method: OECD Test Guideline 489  
Result: negative

### **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.

### **Carcinogenicity**

Not classified based on available information.

### **Components:**

#### **clothianidin (ISO):**

Species : Rat, male and female  
Application Route : Oral  
NOAEL : 3,000 ppm  
Method : OECD Test Guideline 453  
Result : negative

#### **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

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version 1.0	Revision Date: 15.05.2025	SDS Number: 50002634	Date of last issue: - Date of first issue: 15.05.2025
----------------	------------------------------	-------------------------	--

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.

### Reproductive toxicity

Not classified based on available information.

#### Components:

##### **clothianidin (ISO):**

Effects on fertility	:	Test Type: Two-generation study Species: Rat, male and female Application Route: Oral Method: OECD Test Guideline 416 Result: negative
Effects on fetal development	:	Test Type: Pre-natal Species: Rat Application Route: Oral Embryo-fetal toxicity.: NOAEL: >= 125 mg/kg bw/day Method: OECD Test Guideline 414 Result: negative

##### **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

### **STOT-single exposure**

Not classified based on available information.

## TIRRACTO

Version 1.0	Revision Date: 15.05.2025	SDS Number: 50002634	Date of last issue: - Date of first issue: 15.05.2025
----------------	------------------------------	-------------------------	--

---

### Components:

#### **Chlorantraniliprole:**

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

#### **STOT-repeated exposure**

Not classified based on available information.

### Components:

#### **Chlorantraniliprole:**

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

#### **Repeated dose toxicity**

### Components:

#### **clothianidin (ISO):**

Species	:	Rat
NOAEL	:	500 ppm
LOAEL	:	3000 ppm
Application Route	:	Oral
Exposure time	:	90 days
Method	:	OECD Test Guideline 408
Remarks	:	Effects are of limited toxicological significance.

#### **Chlorantraniliprole:**

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

#### **Aspiration toxicity**

Not classified based on available information.

### Components:

#### **Chlorantraniliprole:**

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

#### **Aqueous solution of a modified polymer with pigment affinitive groups:**

No aspiration toxicity classification

### **Further information**

#### Product:

Remarks : No data available

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version  
1.0

Revision Date:  
15.05.2025

SDS Number:  
50002634

Date of last issue: -  
Date of first issue: 15.05.2025

---

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Product:

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 68.09 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to soil dwelling organisms : LC50: 41.61 mg/kg dry weight (d.w.)  
Exposure time: 14 d  
Species: Eisenia fetida (earthworms)  
Method: OECD Test Guideline 207

Toxicity to terrestrial organisms : LD50: 1,596.66 mg/kg  
End point: Acute oral toxicity  
Species: Coturnix japonica (Japanese quail)  
Method: OECD Test Guideline 223

LD50: 0.2007 µg/bee  
Exposure time: 48 h  
End point: Acute oral toxicity  
Species: Apis mellifera (bees)  
Method: OECD Test Guideline 213

LD50: 0.3179 µg/bee  
Exposure time: 48 h  
End point: Acute contact toxicity  
Species: Apis mellifera (bees)  
Method: OECD Test Guideline 214

#### Components:

##### **clothianidin (ISO):**

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): > 117 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Chironomus riparius (harlequin fly)): 0.029 mg/l  
Exposure time: 48 h  
Test Type: static test

Toxicity to algae/aquatic plants : NOEC ( Navicula pelliculosa (Freshwater diatom)): 40 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 201

EC50 ( Navicula pelliculosa (Freshwater diatom)): > 100 mg/l  
Exposure time: 96 h

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version 1.0	Revision Date: 15.05.2025	SDS Number: 50002634	Date of last issue: - Date of first issue: 15.05.2025
----------------	------------------------------	-------------------------	--

Test Type: static test  
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity)	:	10
Toxicity to microorganisms	:	EC50 (activated sludge): > 1,000 mg/l Exposure time: 3 h Method: OECD Test Guideline 209
Toxicity to fish (Chronic toxicity)	:	NOEC: >= 20 mg/l Exposure time: 33 d Species: Pimephales promelas (fathead minnow) Method: US EPA Test Guideline OPPTS 850.1400
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0.12 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test Type: semi-static test Method: OECD Test Guideline 211
		NOEC: 0.0097 mg/l Exposure time: 39 d Species: Americamysis bahia (mysid shrimp) Test Type: flow-through test Method: OPPTS 850.1350
M-Factor (Chronic aquatic toxicity)	:	10

### **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

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version  
1.0

Revision Date:  
15.05.2025

SDS Number:  
50002634

Date of last issue: -  
Date of first issue: 15.05.2025

---

GLP: yes

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: 1.28 mg/l  
Exposure time: 36 d  
Species: *Cyprinodon variegatus* (sheepshead minnow)

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

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

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version 1.0	Revision Date: 15.05.2025	SDS Number: 50002634	Date of last issue: - Date of first issue: 15.05.2025
----------------	------------------------------	-------------------------	--

M-Factor (Chronic aquatic toxicity)	: 10
Toxicity to soil dwelling organisms	: LC50: > 1,000 mg/kg Exposure time: 14 d Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207 GLP: yes  NOEC: 100 mg/kg dry weight (d.w.) Exposure time: 16 d Species: Hypoaspis aculeifer Method: OECD Test Guideline 207  EC50: >100 mg/kg dry weight (d.w.) Exposure time: 16 d Species: Hypoaspis aculeifer Method: OECD Test Guideline 207
Toxicity to terrestrial organisms	: LD50: > 4.0 µg/bee Exposure time: 72 h End point: Acute contact toxicity Species: Apis mellifera (bees) Remarks: Active substance dissolved in acetone  LD50: > 0.005 µg/bee Exposure time: 48 h End point: Acute contact toxicity Species: Apis mellifera (bees) Remarks: Active substance dissolved in water  LD50: > 104.1 µg/bee Exposure time: 48 h End point: Acute oral toxicity Species: Apis mellifera (bees) Remarks: Active substance dissolved in acetone  LD50: > 0.0274 µg/bee Exposure time: 48 h End point: Acute oral toxicity Species: Apis mellifera (bees) Remarks: Active substance dissolved in water  LD50: > 2,250 mg/kg Species: Poephila guttata (zebra finch)
<b>Aqueous solution of a modified polymer with pigment affinitive groups:</b>	
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 128 mg/l Exposure time: 48 h Method: OECD Test Guideline 202

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version  
1.0

Revision Date:  
15.05.2025

SDS Number:  
50002634

Date of last issue: -  
Date of first issue: 15.05.2025

---

### Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 10 - 100 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

LC50 (Leuciscus idus (Golden orfe)): > 1 - 10 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50: > 1 - 10 mg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 ( algae): > 1 - 10 mg/l  
Exposure time: 72 h

EC10 ( algae): > 0.1 - < 1 mg/l

### Persistence and degradability

#### Components:

##### **clothianidin (ISO):**

Biodegradability : Remarks: No data available

##### **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

##### **Aqueous solution of a modified polymer with pigment affinitive groups:**

Biodegradability : Result: Not readily biodegradable.  
Method: OECD Test Guideline 301B

### Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Biodegradability : Result: Readily biodegradable.  
Biodegradation: > 60 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301E

### Bioaccumulative potential

#### Components:

##### **clothianidin (ISO):**

Bioaccumulation : Remarks: No data available

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version  
1.0

Revision Date:  
15.05.2025

SDS Number:  
50002634

Date of last issue: -  
Date of first issue: 15.05.2025

---

### **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

### **Mobility in soil**

#### **Components:**

##### **clothianidin (ISO):**

Distribution among environmental compartments

: Koc: 123 ml/g, log Koc: 2.08  
Remarks: Mobile in soils

##### **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.  
Harmful to aquatic life.  
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.

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## 13. DISPOSAL CONSIDERATIONS

#### **Disposal methods**

Waste from residues

: The product should not be allowed to enter drains, water

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version  
1.0

Revision Date:  
15.05.2025

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50002634

Date of last issue: -  
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---

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.

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## 14. TRANSPORT INFORMATION

### International Regulations

#### UNRTDG

UN number : UN 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Clothianidin, 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.  
(Clothianidin, 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.  
(Clothianidin, Chlorantraniliprole)  
Class : 9  
Packing group : III  
Labels : 9  
EmS Code : F-A, S-F  
Marine pollutant : yes

### Transport in bulk according to IMO instruments

Not applicable for product as supplied.

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version  
1.0

Revision Date:  
15.05.2025

SDS Number:  
50002634

Date of last issue: -  
Date of first issue: 15.05.2025

---

Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## 15. REGULATORY INFORMATION

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

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

TCSI	: Not in compliance with the inventory
TSCA	: Product contains substance(s) not listed on TSCA inventory.
AIIC	: Not in compliance with the inventory
DSL	: This product contains the following components that are not on the Canadian DSL nor NDSL.  3-BROMO-4'-CHLORO-1-(3-CHLORO-2-PYRIDYL)-2'-METHYL-6'-(METHYLCARBAMOYL)-1H-PYRAZOLE-5-CARBOXANILIDE Siloxanes and Silicones, di-Me, reaction products with chlorotrimethylsilane, iso-Pr alc., silica and sodium silicate clothianidin (ISO) Aqueous solution of a modified polymer with pigment affinitive groups
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

## 16. OTHER INFORMATION

Revision Date	: 15.05.2025
Date format	: dd.mm.yyyy

**Full text of other abbreviations**

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

# SAFETY DATA SHEET

according to the Globally Harmonized System



## TIRRACTO

Version  
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50002634

Date of last issue: -  
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---

ACGIH / TWA

: 8-hour, time-weighted average

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

### Disclaimer

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