

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

SECTION 1. IDENTIFICATION

Product identifier

Product name TALSTAR® PROFESSIONAL INSECTICIDE

Other means of identification

Product code 50001318

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.

Details of the supplier of the safety data sheet

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

Supplier Address FMC Corporation
2929 Walnut Street
Philadelphia PA 19104
USA

Emergency telephone

For leak, fire, spill or accident emergencies, call:
1 800 / 424-9300 (CHEMTREC - U.S.A.)
1 703 / 741-5970 (CHEMTREC - International)
1 703 / 527-3887 (CHEMTREC - Alternate)

Medical emergency:
U.S.A. & Canada: +1 800 / 331-3148
All other countries: +1 651 / 632-6793 (Collect)

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Specific target organ toxicity : Category 1 (Central nervous system)
- single exposure

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

Specific target organ toxicity : Category 1 (Central nervous system)
- repeated exposure

GHS label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H302 Harmful if swallowed.
H332 Harmful if inhaled.
H370 Causes damage to organs (Central nervous system).
H372 Causes damage to organs (Central nervous system) through prolonged or repeated exposure.

Precautionary Statements : **Prevention:**
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe mist or vapors.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing.
Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.
P363 Wash contaminated clothing before reuse.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components

Chemical name	CAS-No.	Concentration (% w/w)
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SAFETY DATA SHEET

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TALSTAR® PROFESSIONAL INSECTICIDE

Version 1.13 Revision Date: 08/23/2024 SDS Number: 50001318 Date of last issue: 04/29/2024
Date of first issue: 03/19/2019

Bifenthrin	82657-04-3	7.9
propane-1,2-diol	57-55-6	> 10 - < 20

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Move to fresh air.
If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : Take off all contaminated clothing immediately.
Wash contaminated clothing before re-use.
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
If skin irritation persists, call a physician.
- 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.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Harmful if swallowed.
Harmful if inhaled.
Causes damage to organs.
Causes damage to organs through prolonged or repeated exposure.
- 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.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Dry chemical, CO₂, water spray or regular foam.
- Unsuitable extinguishing : Do not spread spilled material with high-pressure water

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TALSTAR® PROFESSIONAL INSECTICIDE

Version 1.13	Revision Date: 08/23/2024	SDS Number: 50001318	Date of last issue: 04/29/2024 Date of first issue: 03/19/2019
-----------------	------------------------------	-------------------------	---

media	streams.
Specific hazards during fire fighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	: Carbon oxides Thermal decomposition can lead to release of irritating gases and vapors. Fluorinated compounds Chlorinated compounds Hydrogen chloride Hydrogen fluoride
Further information	: 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	: Use personal protective equipment. Ensure adequate ventilation. 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. For disposal considerations see section 13.
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

Advice on protection against fire and explosion	: Normal measures for preventive fire protection.
Advice on safe handling	: Do not breathe vapors/dust. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

SAFETY DATA SHEET

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TALSTAR® PROFESSIONAL INSECTICIDE

Version 1.13 Revision Date: 08/23/2024 SDS Number: 50001318 Date of last issue: 04/29/2024
Date of first issue: 03/19/2019

Dispose of rinse water in accordance with local and national regulations.

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

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

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
propane-1,2-diol	57-55-6	TWA	10 mg/m ³	US WEEL

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

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 : Always have on hand a first-aid kit, together with proper instructions.
Plan first aid action before beginning work with this product.
Ensure that eye flushing systems and safety showers are located close to the working place.
Wear suitable protective equipment.

Hygiene measures : Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version 1.13	Revision Date: 08/23/2024	SDS Number: 50001318	Date of last issue: 04/29/2024 Date of first issue: 03/19/2019
-----------------	------------------------------	-------------------------	---

Physical state	: liquid
Color	: beige
Odor	: mild
Odor Threshold	: No data available
pH	: 6.7
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
Flash point	: does not flash
Evaporation rate	: No data available
Self-ignition	: No data available
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Density	: 8.53 lb/gal
Bulk density	: 8.53 lb/gal
Solubility(ies) Water solubility	: soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity Viscosity, dynamic	: No data available

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

Viscosity, kinematic : No data available

Explosive properties : No data available

Oxidizing properties : No data available

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.
Protect from frost, heat and sunlight.

Incompatible materials : Avoid strong acids, bases, and oxidizers.

Hazardous decomposition products : No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed or if inhaled.

Product:

Acute oral toxicity : LD50 Oral (Rat): 632 mg/kg

Acute inhalation toxicity : LC50 (Rat): 1.60 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2,000 mg/kg

Components:

Bifenthrin:

Acute oral toxicity : LD50 (Rat, male and female): 50.2 - 58.8 mg/kg
Symptoms: Convulsions, Tremors

Acute inhalation toxicity : LC50 (Rat, female): 0.6 - 1.2 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Symptoms: Tremors, Convulsions

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

LC50 (Rat, male): 1.10 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Symptoms: Tremors, Fatality

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Remarks: no mortality

propane-1,2-diol:

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

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

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

Skin corrosion/irritation

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

Product:

Result : slight or no skin irritation.

Components:

Bifenthrin:

Species : Rabbit
Result : slight or no skin irritation.
GLP : yes

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

propane-1,2-diol:

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

Serious eye damage/eye irritation

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

Product:

Result : No eye irritation

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

Components:

Bifenthrin:

Species	:	Rabbit
Result	:	Slight or no eye irritation
Method	:	OECD Test Guideline 405
GLP	:	yes

propane-1,2-diol:

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

Respiratory or skin sensitization

Skin sensitization

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

Respiratory sensitization

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

Product:

Result	:	Not a skin sensitizer.
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Components:

Bifenthrin:

Test Type	:	Maximization Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	May cause sensitization by skin contact.
GLP	:	yes

propane-1,2-diol:

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

Germ cell mutagenicity

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

Components:

Bifenthrin:

Genotoxicity in vitro	:	Test Type: gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Result: negative
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Test Type: reverse mutation assay

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: Mouse lymphoma assay
Metabolic activation: with and without metabolic activation
Result: negative

Genotoxicity in vivo : Test Type: Sex-linked Recessive Lethal Test
Species: *Drosophila melanogaster* (vinegar fly)
Result: negative

Test Type: unscheduled DNA synthesis assay
Species: Rat
Method: OECD Test Guideline 486
Result: negative

propane-1,2-diol:

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

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse
Result: negative

Carcinogenicity

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

Components:

Bifenthrin:

Species : Rat, female
Application Route : Oral
Exposure time : 2 Years
NOAEL : 3 mg/kg bw/day
Result : negative

Species : Mouse, male
Application Route : Oral
Exposure time : 18 month(s)
NOAEL : 7.6 mg/kg bw/day
Result : positive
Symptoms : malignant tumors

propane-1,2-diol:

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

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

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

Components:

Bifenthrin:

Effects on fertility : Test Type: Two-generation study
Species: Rat
Application Route: Oral
General Toxicity Parent: NOAEL: 3 mg/kg bw/day
General Toxicity F1: NOAEL: 5 mg/kg bw/day
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rabbit
Application Route: Oral
General Toxicity Maternal: NOAEL: 2.7 mg/kg bw/day
Teratogenicity: NOAEL: 2.7 mg/kg bw/day
Symptoms: Maternal effects.
Result: No teratogenic effects.

Test Type: Embryo-fetal development
Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 1 mg/kg bw/day
Teratogenicity: NOAEL: 2 mg/kg bw/day
Result: No teratogenic effects.

Species: Rat
Application Route: Oral
General Toxicity Maternal: LOAEL: 7.2 mg/kg bw/day
Developmental Toxicity: LOAEL: 7.2 mg/kg bw/day
Embryo-fetal toxicity.: NOEL: 9.0 mg/kg bw/day
Method: OECD Test Guideline 426
Result: Animal testing did not show any effects on fertility.,
Some evidence of adverse effects on development, based on
animal experiments.

propane-1,2-diol:

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

Effects on fetal development : Test Type: Embryo-fetal development
Species: Mouse

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

Application Route: Oral
Method: OECD Test Guideline 414
Result: Animal testing did not show any effects on fertility.
Remarks: Based on data from similar materials

STOT-single exposure

Causes damage to organs (Central nervous system).

Components:

Bifenthrin:

Target Organs	: Central nervous system
Assessment	: Causes damage to organs.

STOT-repeated exposure

Causes damage to organs (Central nervous system) through prolonged or repeated exposure.

Components:

Bifenthrin:

Target Organs	: Central nervous system
Assessment	: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

Repeated dose toxicity

Components:

Bifenthrin:

Species	: Rat, male and female
NOEL	: 100 ppm
Application Route	: Oral - feed
Exposure time	: 90 d
Remarks	: No toxicologically significant effects were found.

Species	: Dog, male and female
NOEL	: 2.5 mg/kg bw/day
Application Route	: Oral - feed
Exposure time	: 13 w
Symptoms	: Tremors

propane-1,2-diol:

Species	: Rat, male and female
NOAEL	: 1,700 mg/kg
Application Route	: Oral
Exposure time	: 2 Years

Species	: Rat, male and female
NOAEL	: 1,000 mg/kg
LOAEL	: 160 mg/kg
Application Route	: Inhalation
Exposure time	: 90 Days

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

Aspiration toxicity

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

Components:

Bifenthrin:

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

Further information

Product:

Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Bifenthrin:

Toxicity to fish	:	LC50 (Salmo gairdneri): 0.00015 mg/l Exposure time: 96 h Test Type: flow-through test LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.00035 mg/l Exposure time: 96 h Test Type: flow-through test LC50 (Oncorhynchus mykiss (rainbow trout)): 0.000256 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes LC50 (Pimephales promelas (fathead minnow)): 0.000234 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia): 0.00011 mg/l Exposure time: 48 h LC50 (Daphnia): 0.0016 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (algae): 0.822 mg/l Exposure time: 72 h
Toxicity to fish (Chronic tox-	:	NOEC (Oncorhynchus mykiss (rainbow trout)): 0.00012 mg/l

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version 1.13	Revision Date: 08/23/2024	SDS Number: 50001318	Date of last issue: 04/29/2024 Date of first issue: 03/19/2019
-----------------	------------------------------	-------------------------	---

icity)	Exposure time: 21 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC (Daphnia magna (Water flea)): 0.0013 µg/l Exposure time: 21 d NOEC (Daphnia magna (Water flea)): 0.00095 µg/l Exposure time: 21 d
Toxicity to soil dwelling organisms	: LD50 (Eisenia fetida (earthworms)): > 16 mg/kg Exposure time: 14 d Method: OECD Test Guideline 216 Remarks: No significant adverse effect on Nitrogen mineralization.
Toxicity to terrestrial organisms	: LD50 (Colinus virginianus (Bobwhite quail)): 1,800 mg/kg LD50 (Anas platyrhynchos (Mallard duck)): > 2,150 mg/kg LD50 (Apis mellifera (bees)): 0.1 - 0.35 µg/bee Exposure time: 24 h End point: Acute oral toxicity Method: OECD Test Guideline 213 LD50 (Apis mellifera (bees)): 0.1 - 0.3 µg/bee Exposure time: 24 h End point: Acute contact toxicity Method: OECD Test Guideline 214
propane-1,2-diol:	
Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 40,613 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: (Mysidopsis bahia (opossum shrimp)): 18,800 mg/l Exposure time: 96 h
Toxicity to algae/aquatic plants	: EC50 (Pseudokirchneriella subcapitata (green algae)): 34,100 mg/l Exposure time: 48 h Method: OECD Test Guideline 201
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 13,020 mg/l Exposure time: 7 d
Toxicity to microorganisms	: EC50 (Pseudomonas putida): > 20,000 mg/l Exposure time: 18 h

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

Persistence and degradability

Components:

Bifenthrin:

Biodegradability : Result: Not readily biodegradable.

propane-1,2-diol:

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

Bioaccumulative potential

Components:

Bifenthrin:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): 1,709
Remarks: Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible.
See section 9 for octanol-water partition coefficient.

Partition coefficient: n-octanol/water : log Pow: 6.6

propane-1,2-diol:

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

Mobility in soil

Components:

Bifenthrin:

Distribution among environmental compartments : Koc: 236610 ml/g, log Koc: 5.37
Remarks: immobile

Stability in soil :

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

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

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
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.
(Bifenthrin)
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.
(Bifenthrin)
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.
(Bifenthrin)
Class : 9
Packing group : III
Labels : 9

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

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

This material is not a hazardous material as defined by U.S. Department of Transportation 49 CFR Parts 100 through 185, unless shipped in bulk packaging. The classification below pertains to the shipment in bulk packaging [(>119 gal, liquid) or (882 lb, solid)].

49 CFR Road

UN/ID/NA number : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s. (Bifenthrin)
Class : 9
Packing group : III
Labels : CLASS 9
ERG Code : 171
Marine pollutant : yes

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

CERCLA Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

Bifenthrin	82657-04-3	$\geq 5 - < 10$ %
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Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

propane-1,2-diol	57-55-6	$\geq 10 - < 20$ %
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SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

sodium hydroxide	1310-73-2	>= 0 - < 0.1 %
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The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

sodium hydroxide	1310-73-2	>= 0 - < 0.1 %
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This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

water	7732-18-5
propane-1,2-diol	57-55-6
Bifenthrin	82657-04-3

Maine Chemicals of High Concern

octamethylcyclotetrasiloxane [D4]	556-67-2
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Vermont Chemicals of High Concern

octamethylcyclotetrasiloxane [D4]	556-67-2
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Washington Chemicals of High Concern

Product does not contain any listed chemicals

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. 2-METHYLBIPHENYL-3-YLMETHYL (Z)-(1RS,3RS)-3-(2-CHLORO-3,3,3-TRIFLUOROPROP-1-ENYL)-2,2-DIMETHYLCYCLOPROPANECARBOXYLATE Smectite-group minerals
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	: On the inventory, or in compliance with the inventory

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



TALSTAR® PROFESSIONAL INSECTICIDE

Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
1.13	08/23/2024	50001318	Date of first issue: 03/19/2019

NZIoC : Not in compliance with the inventory

TECI : Not in compliance with the inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

FIFRA information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

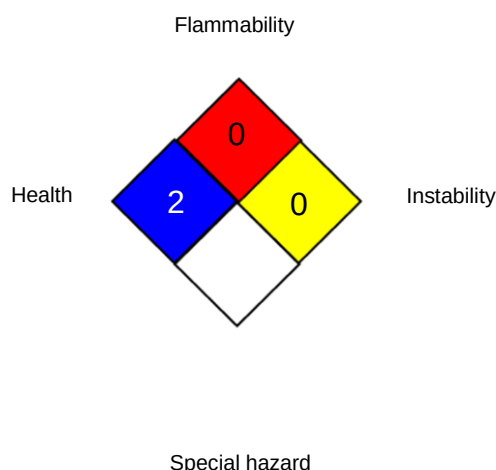
Caution

Harmful if swallowed, Harmful if inhaled, Harmful if absorbed through the skin., This pesticide is extremely toxic to fish and aquatic invertebrates.

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



0 No health threat, 1 Slightly Hazardous, 2 Hazardous, 3 Extreme danger, 4 Deadly

HMIS® IV:

HEALTH	*	4
FLAMMABILITY		0
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

US WEEL	: USA. Workplace Environmental Exposure Levels (WEEL)
US WEEL / TWA	: 8-hr TWA

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Version	Revision Date:	SDS Number:	Date of last issue: 04/29/2024
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AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; 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; HMIS - Hazardous Materials Identification System; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; 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

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Prepared by:

FMC Corporation

SAFETY DATA SHEET

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End of Material Safety Data Sheet