

SAFETY DATA SHEET
BISTAR 10 WP

SDS # : 1482-2A-MX-A
Revision date: 2021-09-21
Version 1
Format: MX



Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name BISTAR 10 WP

Other means of identification

Product Code(s) 1482-2A-MX-A

UN/ID no

Synonyms BIFENTHRIN: (2-methyl[1,1'-biphenyl]-3-yl)methyl (1R,3R)-rel-3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethylcyclopropanecarboxylate (CAS name); 2-methylbiphenyl-3-ylmethyl (Z)-(1RS,3RS)-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)- 2,2-dimethylcyclopropanecarboxylate (IUPAC name)

Active Ingredient(s) Bifenthrin

Formula $C_{23}H_{22}ClF_3O_2$ (Bifenthrin)

Chemical Family Pyrethroid

Recommended use of the chemical and restrictions on use

Recommended Use: Insecticide.

Restrictions on Use: Use as recommended by the label.

Details of the supplier of the safety data sheet

Distributor

FMC Corporation
Agricultural Solutions
2929 Walnut Street
Philadelphia, PA 19104
General Information:
Phone: (215) 299-6000
E-Mail: sdsinfo@fmc.com

Importer:

FMC Chemical, sprl/bvba
Boulevard de la Plaine 9
1050 Brussels
Belgium
Phone: +32+2/645-9548
Fax: +32+2/645-9655

Emergency telephone number:

In case of intoxication call emergency numbers SINTOX (poison control center): 800-00-928-00; (55) 5611 2634 and (55) 5598

6659, 24 hour service 365 days a year.

For emergencies: 911
 01-800-681-9531 (CHEMTREC - Mexico)
 1 703 / 741-5970 (CHEMTREC - International)

Section 2: HAZARDS IDENTIFICATION

This material is considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 5
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1



Signal Word:: **Danger**

Hazard Statements

H332 - Harmful if inhaled
 H302 - Harmful if swallowed
 H313 - May be harmful in contact with skin
 H350 - May cause cancer
 H370 - Causes damage to organs
 H372 - Causes damage to organs through prolonged or repeated exposure
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements

Precautionary Statements - Prevention

P201 - Obtain special instructions before use
 P202 - Do not handle until all safety precautions have been read and understood
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product
 P271 - Use only outdoors or in a well-ventilated area
 P273 - Avoid release to the environment
 P280 - Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

P308 + P311 - If exposed or concerned: Call a POISON CENTER or doctor

IF ON SKIN

P302 - IF ON SKIN: P312 - Call a POISON CENTER or doctor if you feel unwell

IF INHALED

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312 - Call a POISON CENTER or doctor if you feel unwell

IF SWALLOWED

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

P391 - Collect spillage

Precautionary Statements - Storage

P405 - Store locked up

Precautionary Statements - Disposal

P501 - Dispose of contents/container according to label directions

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**Pure substance/preparation** Mixture**Chemical Family** Pyrethroid**Hazardous Components**

Chemical name	CAS-No	Weight %
Bifenthrin	82657-04-3	10
Petroleum distillates, solvent dewaxed light paraffinic	64742-56-9	1-5
Crystalline silica, quartz	14808-60-7	1-5
Mica	12001-26-2	<1
Sodium Borate	1330-43-4	<0.1

Synonyms are provided in Section 1.

Section 4: FIRST AID MEASURES**FIRST AID MEASURES**

General Advice	Avoid contact by using personal protective equipment. Do not give anything by mouth to an unconscious person.
Eye Contact	Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a poison control center or doctor for further treatment advice.
Inhalation	Move person to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Protection of first-aiders	Avoid contact by using personal protective equipment. See Section 8 for more detail.

Most important symptoms and effects, both acute and delayed**Most important symptoms and effects, both acute and delayed** Central nervous system effects.**Indication of any immediate medical attention and special treatment needed****Indication of immediate medical attention and special treatment needed, if necessary** Treat symptomatically.**Section 5: FIRE FIGHTING MEASURES**

Suitable Extinguishing Media

Use CO₂, dry chemical, or foam.

Unsuitable extinguishing media

Avoid heavy hose streams.

Specific extinguishing methods

Evacuate area and fight fire from a safe distance. Very toxic to aquatic life with long lasting effects. Dike to prevent runoff.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

Specific Hazards Arising from the Chemical

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Hazardous Combustion Products

Carbon oxides (CO_x), Nitrogen oxides (NO_x), various chlorinated and fluorinated organic compounds.

Explosive properties

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures**Personal Precautions**

Identify the substance from a safe place. Do not inhale, do not touch and do not walk through spilled material. Isolate the area to ensure sufficient breadth to individuals and to facilitate the work control and cleaning. Keep away from unauthorized personnel. Call 911 and wait for help. Stay upwind and out of low areas. Always have a fire extinguisher available, preferably dry chemical (PQS).

Other

For further cleaning instructions call COTRA (COMMITTEE ON TRANSPORT AND STORAGE) 045 55 4194 0157.

Environmental Precautions**Environmental Precautions**

Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains. Keep out of waterways.

C. Methods and material for containment and cleaning up**Methods for Containment**

Wear the full personal protection equipment, avoiding inhalation or contact with skin or eyes. Dike to contain spill with inert material which is absorbent and non-combustible (clay, sand or soil), then soak up with absorbent material inward from the edges.

Methods for cleaning up

Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area, tools and equipment by washing with water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling

Handling Handle in accordance with good industrial hygiene and safety practice. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

Hygiene measures Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

Conditions for safe storage, including any incompatibilities

Storage Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Keep/store only in original container.

Incompatible products None known.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

This product, as supplied, contains hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Hazardous Components

Chemical name	Brazil	Chile	Argentina	Venezuela	Mexico	ACGIH TLV
Crystalline silica, quartz 14808-60-7	TWA: 0.025 mg/m ³	TWA: 0.08 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.025 mg/m ³	Mexico: TWA 0.025 mg/m ³	TWA: 0.025 mg/m ³
Mica 12001-26-2	TWA: 3 mg/m ³	TWA: 2.63 mg/m ³	TWA: 3 mg/m ³	TWA: 3 mg/m ³	Mexico: TWA 3 mg/m ³	TWA: 3 mg/m ³
Sodium Borate 1330-43-4	TWA: 2 mg/m ³		TWA: 1 mg/m ³	TWA: 2 mg/m ³ STEL: 6 mg/m ³	Mexico: TWA 2 mg/m ³ Mexico: STEL 6 mg/m ³	STEL 6 mg/m ³ TWA: 2 mg/m ³

Appropriate engineering controls

Engineering measures Apply technical measures to comply with the occupational exposure limits (if listed above). When working in confined spaces (tanks, containers, etc.), make sure there is an adequate source of air for breathing and wear the recommended equipment. Ventilate all transport vehicles prior to discharge.

Individual protection measures, such as personal protective equipment

Eye/Face Protection For dust, splash, mist or spray exposure, wear chemical protective goggles.

Skin and Body Protection Use coveralls or long-sleeved uniform and head covering. For large exposures as in case of a spill, use barrier suit covering the entire body, such as a waterproof PVC suit. Leather items, including shoes, belts and watchbands, that have been contaminated should be removed and destroyed. Wash all work clothing before reuse (separately from clothing commonly used).

Hand Protection Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with soap and water before reuse. Check regularly for leaks.

Respiratory Protection In case of insufficient ventilation wear suitable respiratory equipment.

Hygiene measures Clean water should be available for washing in case of eye or skin contamination. Wash

skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

General information

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Dry powder
Appearance	Powder
Odor	Faint hydrocarbon
Color	Beige
Odor threshold	No information available
pH	8.36 (5% solution) @ 25°C
Melting point/freezing point	No information available
Boiling Point/Range	
Flash point	No information available
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific gravity	No information available
Water solubility	No data available
Solubility in other solvents	No information available
Surface tension	No data available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	Powdered material may form explosive dust-air mixtures
Corrosivity	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No data available
VOC content (%)	No information available
Relative density	0.29-0.40
Bulk density	288.4-400.5 kg/m ³

Section 10: STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Dust may form explosive mixture in air. Keep away from open flames, hot surfaces and sources of ignition, Excessive heat.

Incompatible materials

None known.

Hazardous Decomposition Products

Carbon oxides (COx), Nitrogen oxides (NOx), various chlorinated and fluorinated organic compounds.

Section 11: TOXICOLOGICAL INFORMATION**Product Information**

LD50 Oral 355 mg/kg (rat)

LD50 Dermal > 2000 mg/kg (rabbit)

LC50 Inhalation (dust) 3.35 mg/L 4 hr (rat)

Information on likely routes of exposure

Inhalation: Causes headache, drowsiness or other effects to the central nervous system

Eye Contact: May cause slight irritation

Skin Contact: Non-irritating during normal use.

Ingestion: Causes headache, drowsiness or other effects to the central nervous system

Information on toxicological effects

Symptoms: Large doses of bifenthrin ingested by laboratory animals produced signs of toxicity including convulsions, tremors and bloody nasal discharge.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation: Non-irritating

Serious eye damage/eye irritation: May cause slight irritation

Sensitization: Non-sensitizing.

Mutagenicity: Bifenthrin: Not genotoxic in laboratory studies.

Carcinogenicity: Bifenthrin: Weak response, treatment related urinary bladder benign tumors (lesions) in male mice only at the highest dose tested.

Reproductive toxicity: Bifenthrin: No toxicity to reproduction in animal studies. Contains ingredients that are suspected reproductive hazards

STOT - single exposure: Causes damage to organs. See listed target organs below.

STOT - repeated exposure: Causes damage to organs through prolonged or repeated exposure. See listed target organs below.

Developmental toxicity: Bifenthrin: Not teratogenic in animal studies

Chronic toxicity: Bifenthrin: Long-term exposure caused neurotoxicity (tremors and impaired gait) in the early exposure in animal studies, but tremors disappeared with continued exposure.

Chronic exposure to silica dust may increase the risk of developing pneumoconiosis or silicosis, chronic diseases affecting the lungs, characterized by labored breathing, cough, reduction of work capacity, reduction of lung capacity, heart enlargement and failure.

Target organ effects: Bifenthrin: Central Nervous System.

Neurological effects: Bifenthrin: Causes clinical signs of neurotoxicity (tremors, impaired gait, excessive salivation) following acute or subchronic exposure. Tremors disappeared with continued exposure.

Aspiration hazard: No information available

Chemical name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, solvent dewaxed light paraffinic	A2		Known	
Crystalline silica, quartz	A2	Group 1	Known	X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists): A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer): Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program): Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor): X - Present

Section 12: ECOLOGICAL INFORMATION

Very toxic to aquatic life with long lasting effects. The environmental impact of this product has not been fully investigated.

Hazardous Components

Chemical name	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to algae
Bifenthrin	96 h LC50: 0,1 µg/l 21 d NOEC: 0,012 µg/l	48 h EC50: 0,11 µg/l 21 d NOEC 0,0013 µg/l	72 h EC50: 0,822 mg/L

Persistence and degradability: Bifenthrin: Moderately persistent. Does not readily hydrolyze. Not readily biodegradable.

Bioaccumulation: Bifenthrin: The substance has a potential for bioconcentration.

Mobility: Bifenthrin: Immobile.

Other Adverse Effects: See product label for additional application instructions relating to environmental precautions

Section 13: DISPOSAL CONSIDERATIONS

Waste disposal methods

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance. Proper personal protective equipment, as described in Sections 7 and 8, must be worn while handling materials for waste disposal.

Contaminated containers and packages

Containers should be disposed of in accordance with local, state and federal regulations. For removal of the package see the instructions on the label. Handle empty containers and waste product as established in the General Law for the Prevention and Management of

Waste Regulations or Management Plan Pesticides Empty Containers, Registered by SEMARNAT. For further information on the Management plan, visit <http://campolimpio.org.mx/>.

Section 14: TRANSPORT INFORMATION

IMDG/IMO: _____

ICAO/IATA: _____

Not applicable

MEX: _____

UN/ID no	UN3077
Proper Shipping Name	Solid substance potentially dangerous to the environment, n.o.s.
Hazard class	9
Packing Group	III
Marine Pollutant	Bifenthrin

Section 15: REGULATORY INFORMATION

Regulatory Authority

This document has been prepared in accordance with the Globally Harmonized System (GHS). The document consists of 16 sections that cover Resolution 0773/2021 of the Ministries of Labor and Health and Social Protection.

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELI NCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Bifenthrin 82657-04-3				X	X	X		
Fullers earth 8031-18-3	X	X			X	X	X	X
Petroleum distillates, solvent dewaxed light paraffinic 64742-56-9	X	X	X		X	X	X	X
Crystalline silica, quartz 14808-60-7	X	X	X	X	X	X	X	X
Mica 12001-26-2		X			X	X	X	X
Sodium Borate 1330-43-4	X	X	X	X	X	X	X	X

This document has been prepared in accordance with the Globally Harmonized System (GHS). The document consists of 16 sections that cover the Official Mexican Standard NOM-018-STPS-2015 Harmonized system for the identification and communication of hazards and risks from hazardous chemical substances in work centers. 271000. COFEPRIS [Federal Commission for the Protection Against Sanitary

Section 16: OTHER INFORMATION

Prepared By: FMC Corporation

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Revision note .

Restrictions on Use: Use as recommended by the label

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