

**SAFETY DATA SHEET**  
**TALSTAR® INSECTICIDE**

**SDS # :** 6691-A  
**Revision date:** 2016-05-26  
**Format:** NA  
**Version** 1.03



**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier**

**Product Name** TALSTAR® INSECTICIDE

**Other means of identification**

**Product Code(s)** 6691-A

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

**Active Ingredient(s)** Bifenthrin, Prallethrin

**Chemical Family** Pyrethroid Pesticide

**Recommended use of the chemical and restrictions on use**

**Recommended Use:** Insecticide

**Restrictions on Use:** Use as recommended by the label

**Manufacturer Address**

FMC Corporation  
2929 Walnut Street  
Philadelphia, PA 19104  
(215) 299-6000 (General Information)  
msdsinfo@fmc.com (E-Mail General Information)

**Emergency telephone number**

For leak, fire, spill or accident emergencies, call:  
1 800 / 424 9300 (CHEMTREC - U.S.A.)  
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)

Medical Emergencies:  
1 800 / 331-3148 (PROSAR - U.S.A. & Canada)  
1 651 / 632-6793 (PROSAR - All Other Countries - Collect)

**2. HAZARDS IDENTIFICATION**

**Classification**

**OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Aerosols	Category 3
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**GHS Label elements, including precautionary statements**

**EMERGENCY OVERVIEW****Warning****Physical Hazards**

H229 - Pressurized container: May burst if heated

**Hazards not otherwise classified (HNOC)**

No hazards not otherwise classified were identified.

**Other Information**

Very toxic to aquatic life with long lasting effects.

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Chemical Family** Pyrethroid Pesticide.

Chemical name	CAS-No	Weight %
Bifenthrin	82657-04-3	0.05
Prallethrin	23031-36-9	0.03
Dimethyl ether	115-10-6	10-15
Petroleum distillates, hydrotreated light	64742-47-8	1-5

Synonyms are provided in Section 1.

**4. FIRST AID MEASURES**

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.
<b>Inhalation</b>	Move to fresh air. If person is not breathing, call 911 (within the U.S. and Canada) or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
<b>Ingestion</b>	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.
<b>Most important symptoms and effects, both acute and delayed</b>	None known.
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

**5. FIRE-FIGHTING MEASURES**

<b>Suitable Extinguishing Media</b>	Use CO <sub>2</sub> , dry chemical, or foam.
<b>Specific Hazards Arising from the Chemical</b>	Closed containers may rupture violently under fire conditions. Non-flammable aerosol.
<b>Hazardous Combustion Products</b>	Toxic fumes may be produced.

**Explosion data**

**Sensitivity to Mechanical Impact** Not sensitive.  
**Sensitivity to Static Discharge** Not sensitive.

**Protective equipment and precautions for firefighters** As in any fire, wear self-contained breathing apparatus and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions** Isolate and post spill area. Remove all sources of ignition. Ventilate the area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8. If ventilation is not possible wear full protection suit and chemical protective equipment.

**Other** For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

**Environmental Precautions** See Section 12 for additional Ecological Information.

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Transfer damaged cartridges or cans to containers for later disposal. Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13. Rinsate may be disposed at a waste water treatment plant.

**7. HANDLING AND STORAGE**

**Handling** Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

**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

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters

Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Dimethyl ether (115-10-6)	TWA: 1000 ppm	-	-	-
Petroleum distillates, hydrotreated light (64742-47-8)	TWA: 200 mg/m <sup>3</sup> Skin	-	-	-

**Appropriate engineering controls**

**Engineering measures** Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

**Skin and Body Protection** Wear long-sleeved shirt, long pants, socks, and shoes.

**Hand Protection** Protective gloves

<b>Respiratory Protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.
<b>Hygiene measures</b>	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.
<b>General information</b>	If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance</b>	Aerosolized liquid
<b>Physical State</b>	Aerosol
<b>Color</b>	Clear
<b>Odor</b>	Odorless
<b>Odor threshold</b>	No information available
<b>pH</b>	6.0-8.0
<b>Melting point/freezing point</b>	Not applicable
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	Not applicable
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Density</b>	0.975 g/mL
<b>Specific gravity</b>	No information available
<b>Water solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	No information available
<b>Viscosity, dynamic</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Molecular weight</b>	No information available
<b>Bulk density</b>	No information available

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	Not applicable
<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Possibility of Hazardous Reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible materials</b>	None known.
<b>Hazardous Decomposition Products</b>	May emit toxic fumes under fire conditions.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

<b>LD50 Oral</b>	> 5000 mg/kg (rat)
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LD50 Dermal > 5000 mg/kg (rabbit)  
LC50 Inhalation > 5.12 mg/L 4 hr (rat)

Serious eye damage/eye irritation Mild Irritant.  
Skin corrosion/irritation Mild Irritant.  
Sensitization Non-sensitizing.

**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**

**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.

**Mutagenicity** Bifenthrin: Not genotoxic in laboratory studies.

**Carcinogenicity** Bifenthrin: Weak treatment-related response for liver adenocarcinomas and benign bladder tumors (lesion) in male mice.

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

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

**Developmental toxicity** Bifenthrin: Not teratogenic in animal studies.

**STOT - single exposure** Not classified.

**STOT - repeated exposure** Not classified.

**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
Prallethrin 23031-36-9		Group 2A		

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

<b>Bifenthrin (82657-04-3)</b>				
Active Ingredient(s)	Duration	Species	Value	Units
Bifenthrin	96 h LC50	Fish	0.1	µg/L
	72 h EC50	Algae	0.822	mg/L
	48 h EC50	Crustacea	0.11	µg/L
	21 d NOEC	Fish	0.012	µg/L
	21 d NOEC	Crustacea	0.0013	µg/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. Not expected to reach groundwater.

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods** 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.

**Contaminated Packaging** Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions.

**14. TRANSPORT INFORMATION**

**DOT** USDOT is requiring that products formerly classified as "Consumer Commodity, ORM-D" transition to "Limited Quantity" by 12/31/2020. During the transition period the 49CFR carton shipping marks may be Consumer Commodity (old) or Limited Quantity Diamond (new). Please prepare shipping documents to match the carton mark.

**Proper Shipping Name** Consumer commodity  
**Hazard class** ORM-D

**TDG** Ship as Limited Quantity. Carton marks include Limited Quantity and Class 9 Diamond.  
**UN/ID no** UN1950  
**Proper Shipping Name** Aerosols  
**Hazard class** 2.2  
**Marine Pollutant** Bifenthrin.  
**Description** UN1950, Aerosols, 2.2, Marine Pollutant (Bifenthrin)

**ICAO/IATA** Carton Marks: Limited quantity air, orientation arrows, Class 9 Diamond, Consumer Commodity, ID8000  
**UN/ID no** ID8000  
**Proper Shipping Name** Consumer commodity  
**Hazard class** 9  
**Description** ID8000, Consumer Commodity, 9

**IMDG/IMO** Ship as Limited Quantity. Carton marks include Limited Quantity mark and orientation arrows.  
**UN/ID no** UN1950  
**Proper Shipping Name** Aerosols  
**Hazard class** 2  
**EmS No.** F-D, S-U  
**Marine Pollutant** Bifenthrin  
**Description** UN1950, Aerosols, 2.2, Marine Pollutant (Bifenthrin)

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	CAS-No	Weight %	SARA 313 - Threshold Values %
Bifenthrin - 82657-04-3	82657-04-3	0.05	1.0

**SARA 311/312 Hazard Categories**

**Acute health hazard** No  
**Chronic health hazard** No  
**Fire hazard** No  
**Sudden release of pressure hazard** No  
**Reactive Hazard** No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

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**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

*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**

*This product is extremely toxic to fish and aquatic invertebrates.*

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Bifenthrin 82657-04-3	X		
Dimethyl ether 115-10-6	X	X	X

**International Inventories**

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINC S (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Bifenthrin 82657-04-3				X	X	X		
Prallethrin 23031-36-9			X	X	X	X		
Dimethyl ether 115-10-6	X	X	X	X	X	X	X	X
Petroleum distillates, hydrotreated light 64742-47-8	X	X	X		X	X	X	X

**Mexico - Grade**

Slight risk, Grade 1

Chemical name	Mexico - Pollutant Release and Transfer Register - Reporting Emissions for Fabrication, Process or Use - Threshold Quantities	Pollutant Release and Transfer Register - Reporting Emissions - Threshold Quantities
Bifenthrin	100 2500 kg/yr	100 kg/yr
Prallethrin	100 2500 kg/yr	100 kg/yr

**WHMIS Hazard Class**

A - Compressed gases



**16. OTHER INFORMATION**

NFPA	Health Hazards 1	Flammability 1	Instability 0	Special Hazards -
HMIS	Health Hazards 1	Flammability 1	Physical hazard 0	Personal Protection X

Revision date: 2016-05-26  
 Reason for revision: Format Change

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Prepared By:

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**End of Safety Data Sheet**