

# SAFETY DATA SHEET

Talstar® Xtra Granular

SDS # : 6390-1-A  
Revision date: 2015-04-10  
Format: NA  
Version 1



## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Name** Talstar® Xtra Granular

### Other means of identification

**Product Code(s)** 6390-1-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);

ZETA-CYPERMETHRIN: (+/-)- $\alpha$ -cyano(3-phenoxyphenyl)methyl (+/-) cis, trans-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate (CAS name); (RS)-  $\alpha$ -cyano-3-phenoxybenzyl (1RS)-cis-trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (IUPAC name) F2700

**Active Ingredient(s)** Bifenthrin, Zeta-cypermethrin

**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  
1735 Market Street  
Philadelphia, PA 19103  
(215) 299-6000 (General Information)  
msdsinfo@fmc.com (E-Mail General Information)

### Emergency telephone number

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

## 2. HAZARDS IDENTIFICATION

### Classification

**OSHA Regulatory Status**

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


Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2B
Skin sensitization	Category 1B
Carcinogenicity	Category 1A

**GHS Label elements, including precautionary statements**

**EMERGENCY OVERVIEW**

**Danger**

**Hazard Statements**  
 H302 - Harmful if swallowed  
 H317 - May cause an allergic skin reaction  
 H320 - Causes eye irritation  
 H332 - Harmful if inhaled  
 H350 - May cause cancer



**Precautionary Statements - Prevention**

- P202 - Do not handle until all safety precautions have been read and understood
- P261 - Avoid breathing 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
- P272 - Contaminated work clothing should not be allowed out of the workplace
- P280 - Wear protective gloves
- P281 - Use personal protective equipment as required

**Precautionary Statements - Response**

- P308 + P313 - IF exposed or concerned: Get medical advice/ attention
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P337 + P313 - If eye irritation persists: Get medical advice/ attention
- P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
- P333 + P313 - If skin irritation or rash occurs: Get medical advice/ attention
- P363 - Wash contaminated clothing before reuse
- P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
- P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
- P330 - Rinse mouth

**Precautionary Statements - Storage**

- P405 - Store locked up

**Precautionary Statements - Disposal**

- P501 - Dispose of contents/ container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

No hazards not otherwise classified were identified.

**Other Information**

Very toxic to aquatic life with long lasting effects  
May be harmful in contact with skin

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Family** Pyrethroid Pesticide.

Chemical name	CAS-No	Weight %
Bifenthrin	82657-04-3	0.2
Zeta-cypermethrin (F2700)	52315-07-8	0.05
crystalline silica, quartz	14808-60-7	>90
Synthetic amorphous silica	112926-00-8	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 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>	Treat symptomatically. 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>	Foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Water spray or fog.
<b>Specific Hazards Arising from the Chemical</b>	Powdered material may form explosive dust-air mixtures
<b>Explosion data</b>	
<b>Sensitivity to Mechanical Impact</b>	Not sensitive.
<b>Sensitivity to Static Discharge</b>	Not sensitive.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus and full protective gear. Isolate fire area. Evaluate downwind.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Isolate and post spill area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.

<b>Other</b>	For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
<b>Environmental Precautions</b>	Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.
<b>Methods for Containment</b>	Sweep up and shovel into suitable containers for disposal.
<b>Methods for cleaning up</b>	Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area, tools and equipment by washing with bleach 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.

## 7. HANDLING AND STORAGE

<b>Handling</b>	Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.
<b>Storage</b>	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.
<b>Incompatible products</b>	Strong oxidizing agents, Fluorine, Chlorine trifluorine, Oxygen difluoride Strong oxidizing agents. Fluorine. Chlorine trifluorine. Oxygen difluoride.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
crystalline silica, quartz 14808-60-7	TWA: 0.025 mg/m <sup>3</sup>	See note	IDLH: 50 mg/m <sup>3</sup> TWA: 0.05 mg/m <sup>3</sup>	Mexico: TWA 0.1 mg/m <sup>3</sup>
Synthetic amorphous silica 112926-00-8	-	-	-	Mexico: TWA 10 mg/m <sup>3</sup>
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
crystalline silica, quartz 14808-60-7	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>
Synthetic amorphous silica 112926-00-8	TWA: 4 mg/m <sup>3</sup> TWA: 1.5 mg/m <sup>3</sup>	TWA: 6 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-

### Appropriate engineering controls

<b>Engineering measures</b>	Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.
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### Individual protection measures, such as personal protective equipment

<b>Eye/Face Protection</b>	If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.
<b>Skin and Body Protection</b>	Wear long-sleeved shirt, long pants, socks, shoes, chemical-resistant gloves and headgear.
<b>Hand Protection</b>	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 These recommendations apply to the product as supplied

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance</b>	Granules
<b>Physical State</b>	Solid
<b>Color</b>	Brown
<b>Odor</b>	Mild detergent odor
<b>Odor threshold</b>	No information available
<b>pH</b>	~ 6.9
<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>	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Density</b>	97.71 - 100.43 lb/cu ft
<b>Specific gravity</b>	No information available
<b>Water solubility</b>	No data available
<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>	Strong oxidizing agents, Fluorine, Chlorine trifluorine, Oxygen difluoride.
<b>Hazardous Decomposition Products</b>	None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

LD50 Oral 727 mg/kg (rat)  
 LD50 Dermal > 5000 mg/kg (rabbit)  
 LC50 Inhalation > 2.11 mg/L (rat)

Serious eye damage/eye irritation Moderately irritating to eyes.  
 Skin corrosion/irritation May cause slight irritation.  
 Sensitization Sensitizer.

**Information on toxicological effects**

**Symptoms** Large, toxic doses of this product administered to laboratory animals produced signs of toxicity including tremors, loss of coordination, convulsions, staggered gait and oral discharge.

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

**Chronic toxicity** Repeated or prolonged exposure may cause central nervous system effects.  
**Mutagenicity** Bifenthrin, Zeta-cypermethrin: Not genotoxic in animal studies.  
**Carcinogenicity** Bifenthrin: Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH). Did not show carcinogenic effects in animal experiments. Cypermethrin caused an increase in benign lung tumors in mice, but not in rats.

**Neurological effects** Tremors were associated with chronic exposure of laboratory animals to bifenthrin, which may disappear with continued exposure. Zeta-cypermethrin did not cause neurotoxicity in animal experiments.

**Reproductive toxicity** Zeta-cypermethrin: No toxicity to reproduction in animal studies.  
**Developmental toxicity** Bifenthrin, Zeta-cypermethrin: Not teratogenic in animal studies.  
**STOT - single exposure** Not classified.  
**STOT - repeated exposure** Not classified.  
**Target organ effects** Bifenthrin: A slight increase in male mouse urinary bladder tumors at the highest dose was probably not of toxicological concern.  
**Neurological effects** Tremors were associated with chronic exposure of laboratory animals to bifenthrin, which may disappear with continued exposure. Zeta-cypermethrin did not cause neurotoxicity in animal experiments.

**Aspiration hazard** No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
crystalline silica, quartz 14808-60-7	A2	Group 1	Known	X
Synthetic amorphous silica 112926-00-8		Group 3		

ACGIH (American Conference of Governmental Industrial Hygienists)  
 A2 - Suspected Human Carcinogen  
 IARC (International Agency for Research on Cancer)  
 Group 1 - Carcinogenic to Humans  
 Group 3 - Not classifiable as to its carcinogenicity to humans  
 NTP (National Toxicology Program)  
 Known - Known Carcinogen  
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)  
 X - Present

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

3.6% of the mixture consists of component(s) of unknown hazards to the aquatic environment

<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

Zeta-cypermethrin (F2700) (52315-07-8)				
Active Ingredient(s)	Duration	Species	Value	Units
Zeta-cypermethrin	48 h EC50	Crustacea	0.14	µg/L
	96 h LC50	Fish	0.69	µg/L
	72 h EC50	Algae	>1	mg/L
	21 d NOEC	Crustacea	0.01	µg/L
	21 d NOEC	Fish	0.015	µg/L

**Persistence and degradability** Bifenthrin: Moderately persistent. Does not readily hydrolyze. Not readily biodegradable. Zeta-cypermethrin: Non-persistent. Readily hydrolyzed. Not readily biodegradable.

**Bioaccumulation** Bifenthrin: The substance has a potential for bioconcentration. Zeta-cypermethrin: The substance does not have a potential for bioconcentration.

**Mobility** Bifenthrin, Zeta-cypermethrin: 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** Not regulated for transportation if shipped in Non Bulk packaging. The classification below pertains to the shipment in Bulk packaging.

**UN/ID no** UN3077  
**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.  
**Hazard class** 9  
**Packing Group** III  
**Marine Pollutant** Zeta-cypermethrin.  
**Description** UN3077 Environmentally hazardous substances, solid, n.o.s.(Bifenthrin, Zeta-cypermethrin), 9 PG III

**TDG**  
**UN/ID no** UN3077  
**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.  
**Hazard class** 9  
**Packing Group** III  
**Marine Pollutant** Bifenthrin, Zeta-cypermethrin.  
**Description** UN3077, Sustancia sólida peligrosa para el medio ambiente, n.e.p (Bifentrina, Zeta-cipermetrina), 9, PG III

**ICAO/IATA**  
**UN/ID no** UN3077  
**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.  
**Hazard class** 9  
**Packing Group** III  
**Description** UN3077, Sustancia sólida peligrosa para el medio ambiente, n.e.p (Bifentrina, Zeta-cipermetrina), 9, PG III  
**Limited quantity** 30 kg G

**IMDG/IMO**

<b>UN/ID no</b>	UN3077
<b>Proper Shipping Name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Hazard class</b>	9
<b>Packing Group</b>	III
<b>EmS No.</b>	F-A, S-F
<b>Marine Pollutant</b>	Bifenthrin, Zeta-cypermethrin
<b>Description</b>	UN3077, Sustancia sólida peligrosa para el medio ambiente, n.e.p (Bifentrina, Zeta-cipermetrina), 9, PG III

## 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	0.2	1.0

#### **SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic health hazard</b>	Yes
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	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)

#### **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*

*Harmful if swallowed. Causes moderate eye irritation.*

*This pesticide is extremely toxic to fish, aquatic invertebrates, oysters and shrimp.*

### US State Regulations

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Prop. 65
Titanium dioxide - 13463-67-7	Carcinogen
crystalline silica, quartz - 14808-60-7	Carcinogen

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



This product does not contain any substances regulated by state right-to-know regulations

**International Inventories**

Component	TSCA (United States)	DSL (Canada)	EINECS/ELI NCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Bifenthrin 82657-04-3 ( 0.2 )				X	X	X		
Zeta-cypermethrin (F2700) 52315-07-8 ( 0.05 )			X		X	X	X	X
crystalline silica, quartz 14808-60-7 ( >90 )	X	X	X	X	X	X	X	X
Synthetic amorphous silica 112926-00-8 ( 1-5 )		X		X	X	X	X	X

**Mexico - Grade** Moderate risk, Grade 2

**WHMIS Hazard Class** D2A - Very toxic materials  
 D2B - Toxic materials



**16. OTHER INFORMATION**

NFPA	Health Hazards 1	Flammability 1	Instability 0	Special Hazards -
HMIS	Health Hazards 2*	Flammability 1	Physical hazard 0	Personal Protection X

Revision date: 2015-04-10  
 Revision note: Format Change

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**End of Safety Data Sheet**