1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name  Disarm™ G Fungicide

Other means of identification

Product Code(s)  FO001211-A

Synonyms  FLUOXASTROBIN: (E)-[2-[6-(2-chlorophenoxy)-5-fluoropyrimidin-4-yloxy]phenyl](5,6-dihydro-1,4,2-dioxazin-3-yl)methanone O-methylxime (IUPAC name); (1E)-[2-[6-(2-chlorophenoxy)-5-fluoro-4-pyrimidinyl]oxy]phenyl[(5,6-dihydro-1,4,2-dioxazin-3-yl)methanone O-methylxime (CAS name)

Active Ingredient(s)  Fluoxastrobkin

Recommended use of the chemical and restrictions on use

Recommended Use:  Fungicide

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)

| Serious eye damage/eye irritation | Category 2A |

GHS Label elements, including precautionary statements
Disarm™ G Fungicide

EMERGENCY OVERVIEW

Warning

Hazard Statements
H319 - Causes serious eye irritation

Precautionary Statements - Prevention
P264 - Wash face, hands and any exposed skin thoroughly after handling
P280 - Wear eye protection/ face protection
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

Hazards not otherwise classified (HNOC)
No hazards not otherwise classified were identified.

Other Information
Toxic to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoxastrobin</td>
<td>361377-29-9</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Synonyms are provided in Section 1.

4. FIRST AID MEASURES

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
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.

Inhalation
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.

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.

Most important symptoms and effects, both acute and delayed
Central nervous system effects.
Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Treatment is symptomatic and supportive.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray, Foam, Dry powder, Carbon dioxide (CO₂), Sand.

Specific Hazards Arising from the Chemical

Not flammable

Hazardous Combustion Products

In the event of a fire, the formation of hydrogen cyanide, carbon monoxide and nitrogen oxides must be anticipated.

Explosion data

Not sensitive.

Sensitivity to Static Discharge

Not sensitive.

Protective equipment and precautions for firefighters

Do not stay in the gas cloud, stay upwind of the source. Water mist may be used to cool closed containers. Prevent runoff from fire control from entering streams, sewers, or drinking water supply. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.

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

Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up

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

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.

Storage

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

Incompatible products

No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

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**
For dust, splash, mist or spray exposure, wear chemical protective goggles.

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

**Hand Protection**
Rubber/latex/neoprene or other suitable chemical resistant gloves. 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**
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.

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

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Gray free flowing Granules</td>
</tr>
<tr>
<td>Physical State</td>
<td>Granules</td>
</tr>
<tr>
<td>Color</td>
<td>Gray</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>5.8 (1% solution)</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>Upper flammability limit: No information available</td>
</tr>
<tr>
<td></td>
<td>Lower flammability limit: No information available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
</tr>
<tr>
<td>Density</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>No information available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>47 lb/cu ft @ 25°C</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Reactivity**
Not applicable

**Chemical Stability**
Stable under normal conditions.

**Possibility of Hazardous Reactions**
None under normal processing.
Hazardous polymerization does not occur.

Conditions to avoid
None known

Incompatible materials
No information available.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral > 5000 mg/kg (rat)
LD50 Dermal > 5000 mg/kg (rat)
LC50 Inhalation > 5.0 mg/L (rat) (4-hr)

Serious eye damage/eye irritation Moderately irritating.
Skin corrosion/irritation Non-irritating.
Sensitization Non-sensitizer

Information on toxicological effects

Symptoms
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

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

Chronic toxicity
Fluoxastrobins showed reduced body weight and hepatocytomegaly and cytoplasmic changes associated with increased serum liver alkaline phosphatase indicative of cholestasis.

Mutagenicity
Fluoxastrobins. Not genotoxic in laboratory studies.

Carcinogenicity
Fluoxastrobins. Not carcinogenic.

Neurological effects
Fluoxastrobins. No neurotoxicity observed in animal studies.

Reproductive toxicity
Fluoxastrobins. In the reproduction study, there was evidence of decreased body weight in offspring, delayed preputial separation, and incomplete ossification.

Developmental toxicity
Fluoxastrobins. Evidence of transient body weight loss and decreased food consumption.

STOT - single exposure
No information available.

STOT - repeated exposure
May cause damage to organs through prolonged or repeated exposure. See listed target organs below.

Target organ effects
Central Nervous System (CNS). Liver

Neurological effects
Fluoxastrobins. No neurotoxicity observed in animal studies.

Aspiration hazard
No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Persistence and degradability
Fluoxastrobins: Persistent in soil.

Bioaccumulation
Fluoxastrobins: Material may have some potential to bioaccumulate.

Mobility
Fluoxastrobins: Low mobility in soil.

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 regulations. Refer to the product label for container disposal instructions.
14. TRANSPORT INFORMATION

DOT

NOT REGULATED This material is not a hazardous material as defined by U.S. Department of Transportation at 49 CFR Parts 100 through 185.

TDG

Classification below is only applicable when shipped by vessel and is not applicable when shipped by road or rail only.

UN/ID no
UN3077

Proper Shipping Name
Environmentally hazardous substance, solid, n.o.s.

Hazard class
9

Packing Group
III

Description
UN3077, Environmentally hazardous substance, solid, n.o.s. (Fluoxastrobin), 9, III, Marine Pollutant

ICAO/IATA

UN/ID no
UN3077

Proper Shipping Name
Environmentally hazardous substance, solid, n.o.s.

Hazard class
9

Packing Group
III

Description
UN3077, Environmentally hazardous substance, solid, n.o.s. (Fluoxastrobin), 9, III, Marine Pollutant

IMDG/IMO

UN/ID no
UN3077

Proper Shipping Name
Environmentally hazardous substance, solid, n.o.s.

Hazard class
9

Packing Group
III

EmS No.
F-A, S-F

Description
UN3077, Environmentally hazardous substance, solid, n.o.s. (Fluoxastrobin), 9, III, Marine Pollutant

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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard
Yes

Chronic health hazard
Yes

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).

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**
Causes moderate eye irritation. Harmful if swallowed or absorbed through skin.
This pesticide is 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**
This product does not contain any substances regulated by state right-to-know regulations

### International Inventories

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

Revision date: 2016-05-26
Reason for revision: (M)SDS sections updated

**Disclaimer**
FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HERELN. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. Use of this product is regulated by the U.S. Environmental Protection Agency (EPA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Further, since the conditions and methods of use are beyond the control of FMC Corporation, FMC corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

Prepared By:

FMC Corporation

FMC Logo - Trademark of FMC Corporation

© 2017 FMC Corporation. All Rights Reserved.

End of Safety Data Sheet