

Syngenta Crop Protection, Inc.
Post Office Box 18300
Greensboro, NC 27419

In Case of Emergency, Call
1-800-888-8372

1. PRODUCT IDENTIFICATION

Product Name: **INSPIRE SUPER MP** Product No.: A7402T
 EPA Signal Word: Warning
 Active Ingredient(%): Difenoconazole (23.2%) CAS No.: 119446-68-3
 Chemical Name: 1H-1,2,4-Triazole, 1-[[[2-[2-chloro-4-(4-chlorophenoxy)phenyl]-4-methyl-1,3-dioxolan-2-yl]methyl]-
 Chemical Class: Triazole Fungicide
 EPA Registration Number(s): 100-1262 **Section(s) Revised: 1**

2. HAZARDS IDENTIFICATION
Health and Environmental

Irritating to eyes and skin. May cause sensitization by skin contact. Vapors may cause drowsiness and dizziness.

Hazardous Decomposition Products

May decompose at high temperatures forming toxic gases.

Physical Properties

Appearance: Yellow to brown liquid

Odor: Not determined

Unusual Fire, Explosion and Reactivity Hazards

Combustible liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Petroleum Solvent	Not Established	Not Established	100 mg/m ³ (15 ppm) *	No
Difenoconazole (23.2%)	Not Established	Not Established	8 mg/m ³ TWA ***	No

* recommended by manufacturer

*** Syngenta Occupational Exposure Limit (OEL)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

Syngenta Hazard Category: C, S

4. FIRST AID MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so after calling 800-888-

8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

- Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.
- Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.
- Inhalation: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Notes to Physician

There is no specific antidote if this product is ingested.

Treat symptomatically.

Persons suffering a temporary allergic reaction may respond to treatment with antihistamines or steroid creams and/or systemic steroids.

Contains petroleum distillate - vomiting may cause aspiration pneumonia.

Medical Condition Likely to be Aggravated by Exposure

None known.

5. FIRE FIGHTING MEASURES

Fire and Explosion

Flash Point (Test Method):	156°F (Pensky-Martens CC)	
Flammable Limits (% in Air):	Lower: Not Applicable	Upper: Not Applicable
Autoignition Temperature:	Not Available	
Flammability:	Combustible liquid	

Unusual Fire, Explosion and Reactivity Hazards

Combustible liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

In Case of Fire

Use appropriate extinguishing media for combustibles in the area. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions in Protective Equipment Section. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

- Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.
- Eye Contact: Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- Skin Contact: Where contact is likely, wear chemical-resistant gloves (such as barrier laminate or Viton), coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.
- Inhalation: A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any R, P or HE filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: Yellow to brown liquid
- Odor: Not determined
- Melting Point: Not Applicable
- Boiling Point: Not Available
- Specific Gravity/Density: 1.08 g/cm³ @ 68°F (20°C)
- pH: 6 - 9 (1% in deionized water)

Solubility in H₂O

Difenoconazole: 15mg/l @ 77°F (25°C)

Vapor Pressure

Difenoconazole: 2.5 x 10⁽⁻¹⁰⁾ mmHg @ 77°F (25°C)

10. STABILITY AND REACTIVITY

- Stability: Stable under normal use and storage conditions.
- Hazardous Polymerization: Will not occur.
- Conditions to Avoid: None known.
- Materials to Avoid: None known.
- Hazardous Decomposition Products: May decompose at high temperatures forming toxic gases.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (Finished Product)

- Ingestion: Oral (LD50 Rat) : 3129 mg/kg body weight
- Dermal: Dermal (LD50 Rat) : > 2000 mg/kg body weight (based on a substantially similar formulation)
- Inhalation: Inhalation (LC50 Rat) : > 5.4 mg/l air - 4 hours (based on a substantially similar formulation)
- Eye Contact: Highly Irritating (Rabbit) (based on a substantially similar formulation)
- Skin Contact: Irritating (Rabbit) (based on a substantially similar formulation)
- Skin Sensitization: Sensitizing (Guinea Pig) (based on a substantially similar formulation)

Reproductive/Developmental Effects

Difenoconazole: None observed.

Chronic/Subchronic Toxicity Studies

Difenoconazole: Kidney and liver effects at high doses (>5000 ppm; rats); Eye effects in dogs at high dose levels.

Carcinogenicity

Difenoconazole: 2/70 male rats in the highest dose group (20000 ppm) were found to have squamous cell carcinoma in the non-glandular stomach. Effect did not occur in female rats or in mice and not considered relevant to humans. Increase in brain tumors (mice) at doses exceeding the Maximum Tolerated Dose (MTD) (>2500 ppm).

Other Toxicity Information

None

Toxicity of Other Components

Petroleum Solvent

Slight eye irritant. Frequent or prolonged contact may cause skin irritation or dermatitis. High vapor/aerosol concentrations may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other CNS effects.

Target Organs

Active Ingredients

Difenoconazole: Brain, liver, kidney, gastrointestinal tract

Inert Ingredients

Petroleum Solvent: Eye, respiratory tract, CNS

12. ECOLOGICAL INFORMATION

Summary of Effects

Difenoconazole:

Highly toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Relatively nontoxic to wildlife.

Ecotoxicity Effects

Difenoconazole:

Bees LC50/EC50 > 100 ug/bee

Invertebrate (Water Flea) LC50/EC50 0.77 ppm

Fish (Trout) LC50/EC50 1.1 ppm

Fish (Bluegill) LC50/EC50 1.2 ppm

Bird (Bobwhite Quail) 8-day dietary LC50/EC50 4,760 ppm

Bird (Mallard Duck) 8-day dietary LC50/EC50 > 5,000 ppm

Environmental Fate

Difenoconazole:

The information presented here is for the active ingredient, difenoconazole.

Stable in soil and water. Low to moderate mobility in soil. Sinks in water (after 24 h).

13. DISPOSAL CONSIDERATIONS

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA

Packages smaller than 119 gallons: Not regulated.

Packages larger than 119 gallons:

Proper Shipping Name: Combustible Liquid, N.O.S. (Petroleum Naphtha)

Hazard Class or Division: Combustible Liquid

Identification Number: NA 1993

Packing Group: PG III

Note: Packages prepared for export are classified in compliance with the international shipping standards

Air Transport - NAFTA

Packages smaller than 119 gallons: Not regulated.

Packages larger than 119 gallons: Prohibited.

Note: Packages prepared for export are classified in compliance with the international shipping standards.

B/L Freight Classification

Fungicides, NOIBN

Comments

Water Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Difenoconazole/Petroleum Naphtha), Marine Pollutant

Hazard Class or Division: Class 9

Identification Number: UN 3082

Packing Group: PG III

IMDG EMS: F-A, S-F

IMDG Flash Point: 156°F (69°C)

Air Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Difenoconazole/Petroleum Naphtha)

Hazard Class or Division: Class 9

Identification Number: UN 3082

Packing Group: PG III

Packing Auth.: 914 Spec. Provision A97

Note: Max. inner package; plastic - 5 liters, metal - 10 liters

Max. single package; 450 liters

15. REGULATORY INFORMATION

EPCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard
Chronic Health Hazard
Fire Hazard

Section 313 Toxic Chemicals: Not Applicable

California Proposition 65

Not Applicable

CERCLA/SARA 302 Reportable Quantity (RQ)

None

RCRA Hazardous Waste Classification (40 CFR 261)

Not Applicable

TSCA Status

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 2
Flammability: 2
Instability: 0

HMIS Hazard Ratings

Health: 2
Flammability: 2
Reactivity: 0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 1/3/2008

Revision Date: 2/20/2008

Replaces: 2/6/2008

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

End of MSDS