Safety Data Sheet

INSPIRE®

Date: 8/2/2018
Replaces: 2/13/2017

1. PRODUCT IDENTIFICATION

Product identifier on label: **INSPIRE®**
Product No.: A7402T
Use: Fungicide
Manufacturer: Syngenta Crop Protection, LLC
Post Office Box 18300
Greensboro NC 27419
Manufacturer Phone: 1-800-334-9481

Emergency Phone: 1-800-888-8372

2. HAZARDS IDENTIFICATION

Classifications:
Carcinogenicity: Category 2
Eye Damage/Irritation: Category 2A
Aspiration Hazard: Category 1
Flammable Liquid: Category 4

Signal Word (OSHA): Danger

Hazard Statements:
Combustible liquid
May be fatal if swallowed and enters airways
Causes serious eye irritation
Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Hazard Symbols:

Precautionary Statements:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
If exposed or concerned: Get medical advice/attention.
Keep away from heat, sparks, open flames, hot surfaces. No smoking.
Wash hands and face thoroughly after handling.
Wear protective gloves, protective clothing, eye protection.
If swallowed: Immediately call a poison center, doctor or Syngenta.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice.
Do NOT induce vomiting.

In case of fire: Use dry chemical, foam or CO2 for extinction.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents and container in accordance with local regulations.

Other Hazard Statements: 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

Chemical Name	Common Name	CAS Number	Concentration
Naphthalene	Naphthalene	91-20-3	<1.0%
Surfactant	Surfactant	61791-12-6	<10.0%
Petroleum Solvent	Petroleum Solvent	64742-94-5	>=50.0%
Surfactant	Surfactant	68920-66-1	<5.0%
Emulsifier	Emulsifier	68953-96-8	<5.0%
Other ingredients	Other ingredients	Trade Secret	<5.8%
1H-1,2,4-Triazole, 1-[[2-[2-chloro-4-(4-chlorophenoxy)phenyl]-4-methyl-1,3-dioxolan-2-yl]methyl]-	Difenoconazole	119446-68-3	23.2%

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

4. FIRST AID MEASURES

Have the product container, label or 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.

Most important symptoms/effects:

Eye irritation

Indication of immediate medical attention and special treatment needed:

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.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use dry chemical, foam or CO2 extinguishing media. If water is used to fight fire, dike and collect runoff.

Specific 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.

Special protective equipment and precautions for firefighters:

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Follow exposure controls/personal protection outlined in Section 8.

Methods and materials for containment and cleaning up:

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

Precautions for safe handling:

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.

Conditions for safe storage, including any incompatibilities:

Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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

Occupational Exposure Limits:

Chemical Name	OSHA PEL	ACGIH TLV	Other	Source
Naphthalene	10 ppm TWA	10 ppm TWA (skin)	10 ppm TWA	NIOSH
Surfactant	Not Established	Not Established	Not Established	Not Applicable

Petroleum Solvent	Not Established	Not Established	300 ppm (2,700 mg/m³) TWA	Manufacturer
Surfactant	Not Established	Not Established	Not Established	Not Applicable
Emulsifier	Not Established	Not Established	Not Established	Not Applicable
Other ingredients	Not Established	Not Established	Not Established	Not Applicable
Difenoconazole	Not Established	Not Established	5 mg/m³ TWA	Manufacturer

Appropriate engineering controls:

Use effective engineering controls to comply with occupational exposure limits (if applicable).

Individual protection measures:

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.

Inhalation:

A combination particulate/organic vapor respirator should be used until effective engineering controls are installed to comply with occupational exposure limits, or until exposure limits are established. Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with an HE prefilter.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow to brown liquid

Odor: Aromatic

Odor Threshold: Not Available

pH: 5- 9 (1% w/v)

Melting point/freezing point: Not Applicable

Initial boiling point and boiling range: Not Available

Flash Point (Test Method): 71°C (SCC)

Flammable Limits (% in Air): Not Available

Flammability: Combustible liquid

Vapor Pressure: Difenoconazole 2.5 x 10(-10) mmHg @ 77°F (25°C)

Vapor Density: Not Available

Relative Density: 1.071 g/cm³ @ 68°F (20°C)

Solubility (ies): Difenoconazole 15 mg/l @ 77°F (25°C)

Partition coefficient: n-octanol/water: Not Available

Autoignition Temperature: 460°C

Decomposition Temperature: Not Available

Viscosity: 26.0mPa @ 68°F (20°C)

Other: Surface tension: 36.0 mN/m, 25 degrees celcius

10. STABILITY AND REACTIVITY

Reactivity: Not reactive.

Chemical stability: Stable under normal use and storage conditions.

Possibility of hazardous reactions: Will not occur.

Conditions to Avoid: No decomposition if used as directed.

Incompatible materials: None known.

Hazardous Decomposition Products: None known.

11. TOXICOLOGICAL INFORMATION

Health effects information

Likely routes of exposure: Dermal, Inhalation

Symptoms of exposure: Eye irritation

Delayed, immediate and chronic effects of exposure: Possible carcinogenicity, Eye irritation

Numerical measures of toxicity (acute toxicity/irritation studies (finished product))

Ingestion:	Oral (LD50 Female Rat) :	3,129 mg/kg body weight
Dermal:	Dermal (LD50 Rat) :	> 5,000 mg/kg body weight (based on a substantially similar formulation)
Inhalation:	Inhalation (LC50 Rat) :	> 5.17 mg/l air - 4 hours (based on a substantially similar formulation)
Eye Contact:	Moderately Irritating (Rabbit) (based on a 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: Did not show carcinogenic effects in animal experiments.

Chemical Name	NTP/IARC/OSHA Carcinogen
Naphthalene	See "Toxicity", Sec. 11
Surfactant	No
Petroleum Solvent	No
Surfactant	No
Emulsifier	No
Other ingredients	No
1H-1,2,4-Triazole, 1-[[2-[2-chloro-4-(4-chlorophenoxy)phenyl]-4-methyl-1,3-dioxolan-2-yl]methyl]-	No

Other Toxicity Information

None

Toxicity of Other Components

Emulsifier

Moderately irritating to eyes. Irritating to respiratory system and skin.

Naphthalene

Exposure to naphthalene can cause cataracts, liver damage, kidney failure, respiratory failure, hematuria, anemia, damage to red blood cells, leukocytosis, or coma.
Carcinogen Status:
NTP: Anticipated Carcinogen
IARC: Group 2B Possible Human Carcinogen

Other ingredients

Not Established

Petroleum Solvent

Exposure may cause eye and skin irritation.
Effects of Overexposure: High vapor concentrations (greater than approximately 700 ppm, attainable at elevated temperatures well above ambient) are irritating to the eyes and the respiratory tract, and may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects, including death.

Surfactant

Exposure can result in eye and skin irritation. May be harmful if swallowed.

Surfactant

Exposure can cause eye damage.

Target Organs

Active Ingredients

Difenoconazole:	Brain, liver, kidney, gastrointestinal tract

Inert Ingredients

Emulsifier:	Respiratory system, skin, eye, CNS, liver, kidney
Naphthalene:	Eye, liver, kidney, respiratory tract, blood, CNS
Other ingredients:	Not Established
Petroleum Solvent:	Eye, skin, respiratory tract, CNS
Surfactant:	Eye, skin
Surfactant:	Eye

12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

Difenoconazole:

Fish (Rainbow Trout) 96-hour LC50 1.1 mg/l

Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 0.77 mg/l

Green Algae 72-hour EbC50 0.032 mg/

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: Compounds, Weed Killing, Liquid, (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.

Comments

Water Transport - International
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Difenoconazole/Petroleum Naphtha), Marine Pollutant
Hazard Class: Class 9
Identification Number: UN 3082
Packing Group: PG III
IMDG Flash Point: 156°F (69°C)

Air Transport
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Difenoconazole/Petroleum Naphtha)
Hazard Class: Class 9
Identification Number: UN 3082
Packing Group: PG III

15. REGULATORY INFORMATION

Pesticide Registration:

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:

Warning: Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed. Avoid contact with skin, eyes, or clothing.

EPA Registration Number(s):

100-1262

EPCRA SARA Title III Classification:

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

Section 313 Toxic Chemicals: Naphthalene <1.0% (CAS No. 91-20-3)

California Proposition 65:

This product contains a chemical known to the State of California to cause cancer.

CERCLA/SARA 304 Reportable Quantity (RQ):

Report product spills > 1800 gal (based on naphthalene [RQ = 100 lbs.] content in the formulation)

RCRA Hazardous Waste Classification (40 CFR 261):

Not Applicable

TSCA Status:

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings		HMIS Hazard Ratings	
Health:	2	Health:	2
Flammability:	2	Flammability:	2
Instability:	0	Reactivity:	0

Syngenta Hazard Category: D,S

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme
*	Chronic

For non-emergency questions about this product call:

1-800-334-9481

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Section(s) Revised: 2,11

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