HURRICANE® WDG

Date: 7/15/2015 Replaces: 3/9/2015



1. PRODUCT IDENTIFICATION

Product identifier on label	: HURRICANE® WDG
Product No.:	A17922A
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:	Specific Target Organ Toxicity: Respiratory Irritation Category 3 Carcinogenicity: Category 1A Specific Target Organ Toxicity: Repeated Category 1
Signal Word (OSHA):	Danger
Hazard Statements:	May cause respiratory irritation May cause cancer Causes damage to organs through prolonged or repeated exposure

```
Hazard Symbols:
```



Precautionary Statements:	Obtain special instructions before use.
	Do not handle until all safety precautions have been read and understood.
	Do not breathe dust.
	Wash hands and face thoroughly after handling.
	Do not eat, drink or smoke when using this product.
	Use only outdoors or in a well-ventilated area.
	Wear protective gloves, protective clothing, eye protection.
	If inhaled: Remove person to fresh air and keep comfortable for breathing.
	If exposed or concerned: Get medical advice/attention.
	Call a poison center, doctor or Syngenta if you feel unwell.
	Store locked up.
	Dispose of contents and container in accordance with local regulations.
Other Hazard Statements:	May form combustible dust concentrations in air.

HURRICANE® WDG

Date: Replaces:



3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS Number	Concentration
Crystalline Silica, Quartz and Cristobalite	Crystalline Silica, Quartz and Cristobalite	14808-60-7	Trade Secret
Diatomaceous Earth	Diatomaceous Earth	61790-53-2	Trade Secret
Other ingredients	Other ingredients	Trade Secret	<52.0%
(R,S)-2-[(2,6-dimethylphenyl)- methoxyacetylamino]-propionic acid methyl ester	Mefenoxam	70630-17-0 & 69516-34-3	16.0%
4-(2,2-difluoro-1,3-benzodioxol-4-yl)-1H- pyrrole-3-carbonitrile	Fludioxonil	131341-86-1	32.0%

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 contol 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

Most important symptoms/effects:

Respiratory irritation

Indication of immediate medical attention and special treatment needed:

doctor for further treatment advice.

There is no specific antidote if this product is ingested.

Treat symptomatically.

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:

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

See also Sec. 7.

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.

HURRICANE® WDG

Date: 7/15/2015 Replaces: 3/9/2015



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:

Avoid dust formation.

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 outlined in Section 8. Sweep up material and place in a 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:

This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents.

This material could become charged under certain conditions such as pneumatic conveying.

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
Crystalline Silica, Quartz and Cristobalite	10 mg/m³/(%SiO2+2) (respirable dust)	0.025 mg/m³ (respirable silica)	0.05 mg/m ³ (respirable dust)	NIOSH
Diatomaceous Earth	80 mg/m³/%SiO2 (20 mppcf) TWA	Not Established	6 mg/m³ TWA	NIOSH
Other ingredients	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Mefenoxam	Not Established	Not Established	5 mg/m³ TWA	Syngenta
Fludioxonil	Not Established	Not Established	5 mg/m³ TWA	Syngenta

Appropriate engineering controls:

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

Individual protection measures:

HURRICANE® WDG

Date: Replaces: 7/15/2015 3/9/2015



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 dust-proof chemical goggles.

Skin Contact:

Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear.

Inhalation:

A particulate filter respirator may be necessary until effective engineering controls are installed to comply with occupational exposure limits. Use NIOSH certified respirator with any N, R, P or HE filter. 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: Brown g	ranules	
Odor: Weak		
Odor Threshold: Not	Available	
pH: 7.0 - 10 (as packa	aged)	
Melting point/freezing p	oint: Not A	vailable
Initial boiling point and	boiling rang	ge: Not Applicable
Flash Point (Test Metho	od):	Not Available
Flammable Limits (% in	Air):	Not Available
Flammability:		Combustible powder
Vapor Pressure: Fludi	oxonil 2	2.9 x 10(-9) mmHg @ 77°F (25°C)
Mefe	noxam	2.5 x 10(-5) mmHg @ 77°F (25°C)
Vapor Density: Not Av	ailable	
5	e bulk den -0.65 g/ml	sity 0.43-0.63 g/ml; Packed bulk density
Solubility (ies): Fludi	oxonil 1	I.8 mg/I @ 77°F (25°C)
Mefe	noxam	26 g/l @ 77°F (25°C)
Partition coefficient: n-o	ctanol/wate	er: Not Available
Autoignition Temperatu	re: Not Av	vailable
Decomposition Temper	ature: No	ot Available
Viscosity: Not Available	е	
Other: None		

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: None known.



		<i>, , , ,</i>
HURRICANE® \	NDG	
Date: 7/15/201	5	
Replaces: 3/9/207	5	
Incompatible materials:	None known.	
Hazardous Decomposit	ion Products: None known.	
11. TOXICOLOGICAL INFO	RMATION	
Health effects informatio	<u>n</u>	
Likely routes of exposure	e: Dermal, Inhalation	
Symptoms of exposure:	Respiratory irritation	
Delayed, immediate and	chronic effects of exposure:	Possible carcinogenicity, Respiratory irritation
Numerical measures of t	oxicity (acute toxicity/irritation	studies (finished product))
Ingestion:	Oral (LD50 Female Rat) :	3129 mg/kg body weight
Dermal:	Dermal (LD50 Rat) :	> 5050 mg/kg body weight
Inhalation:	Inhalation (LC50 Rat) :	Not Available
Eye Contact:	Mildly Irritating (Rabbit)	
Skin Contact:	Non-Irritating (Rabbit)	
Skin Sensitization:	Not a Sensitizer (Guinea P	Pig)

Reproductive/Developmental Effects

Fludioxonil: Delayed development at doses causing maternal toxicity.

Mefenoxam: None observed.

Chronic/Subchronic Toxicity Studies

Fludioxonil: Liver and kidney toxicity at high dose levels.

Mefenoxam: Liver effects at high dose animal tests.

Carcinogenicity

Fludioxonil: Marginal increase (7%) of liver tumors (female, rats: 3,000 ppm); Within historical control range (1 to 10%). Mefenoxam: None observed.

Chemical Name	NTP/IARC/OSHA Carcinogen
Crystalline Silica, Quartz and Cristobalite	IARC 1; ACGIH A2
Diatomaceous Earth	IARC 3
Other ingredients	No
(R,S)-2-[(2,6-dimethylphenyl)- methoxyacetylamino]-propionic acid methyl ester	No
4-(2,2-difluoro-1,3-benzodioxol-4-yl)-1H- pyrrole-3-carbonitrile	No
Other Toxicity Information None	
Toxicity of Other Components	

syngenta®

Date:

Replaces: 3/9/2015

Crystalline Silica, Quartz and Cristobalite

7/15/2015

Chronic inhalation exposure to crystalline silica is known to cause silicosis and pulmonary fibrosis in humans. Experimental animals exposed to crystalline silica developed respiratory tract cancers.

Diatomaceous Earth

The carrier in this product is naturally occurring diatomaceous earth. Natural diatomaceous earth contains a small percentage of naturally occurring crystalline silica, which is considered a human carcinogen. Chronic inhalation exposure to crystalline silica is known to cause silicosis and pulmonary fibrosis in humans. The amount of crystalline silica in this product is minimal and the potential for overexposure in manufacturing operations is low.

Other ingredients

Not Applicable

Target Organs

Active Ingredients	
Fludioxonil:	Liver, kidney
Mefenoxam:	Liver
Inert Ingredients	
Crystalline Silica, Quartz and Cristobalite:	Respiratory tract
Diatomaceous Earth:	Respiratory tract
Other ingredients:	Not Applicable

12. ECOLOGICAL INFORMATION

Eco-Acute Toxicity

Mefenoxam:

Fish (Rainbow Trout) 96-hour LC50 > 121 ppm Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 > 113 ppm Bird (Bobwhite Quail) 14-day LD50 981 mg/kg

Fludioxonil:

Fish (Rainbow Trout) 96-hour LC50 0.47 ppm

Green Algae 5-day EC50 0.087 ppm

Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 0.9 ppm

Bird (Bobwhite Quail) 14-day LD50 > 2000 mg/kg

Environmental Fate

Fludioxonil:

The information presented here is for the active ingredient, fludioxonil. Does not bioaccumulate. Persistent in soil. Stable in water. Low mobility in soil. Sinks in water (after 24 h).

Mefenoxam:

The information presented here is for the active ingredient, mefenoxam. Does not bioaccumulate. Not persistent in soil or water. Moderate mobility in soil. Mixes/sinks (after 24 h).

HURRICANE® WDG

Date: Replaces:

7/15/2015 3/9/2015



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 Not regulated

Comments

Water Transport - International Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), Marine Pollutant Hazard Class: Class 9 Identification Number: UN 3077 Packing Group: PG III

Air Transport Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil) Hazard Class: Class 9 Identification Number: UN 3077 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:

Caution: Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Harmful if absorbed through skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

EPA Registration Number(s): 100-1393

EPCRA SARA Title III Classification:

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

Section 313 Toxic Chemicals: None

California Proposition 65:

This product contains trace amounts of chemical(s), known to the State of California to cause cancer as unintended impurities resulting from other entities' manufacturing or processing operations which Syngenta cannot control.

CERCLA/SARA 304 Reportable Quantity (RQ):

Not Applicable



IURRICANE® WI	JG				
Date: 7/15/2015					
eplaces: 3/9/2015					
RCRA Hazardous Waste C	lassification (40	CFR 261):			
Not Applicable					
TSCA Status:					
Exempt from TSCA, subject	ct to FIFRA				
6. OTHER INFORMATION					
NFPA Hazard Ratings		HMIS Hazard Ratings		0	Minimal
Health:	1	Health:	1	1	Slight
Flammability:	2	Flammability:	2	2	Moderate
Instability:	0	Reactivity:	0	3	Serious
Syngenta Haza	rd Category: D			4	Extreme
0)goina i iaza	a calogo.j			^	Chronic
	For non-	emergency questions al	pout this product ca	all:	
		1-800-334-94	81		
Original Issued Date:	4/11/2011				
Revision Date:	7/15/2015	Replaces:	3/9/2015		
	4, 11, 16				