

CRUISERMAXX® POTATO EXTREME

Date: 7/16/2015
 Replaces: 3/10/2015

1. PRODUCT IDENTIFICATION

Product identifier on label: **CRUISERMAXX® POTATO EXTREME**

Product No.: A18232A
 Use: Insecticide and 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: Not Applicable
 Signal Word (OSHA): Not Applicable
 Hazard Statements: Not Applicable

Hazard Symbols:

Precautionary Statements: Not Applicable

Other Hazard Statements: None

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | Common Name | CAS Number | Concentration |
|---|-------------------|--------------|---------------|
| Glycerin | Glycerin | 56-81-5 | Trade Secret |
| 1,2-Propanediol | Propylene Glycol | 57-55-6 | Trade Secret |
| Other ingredients | Other ingredients | Trade Secret | <63.69% |
| 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 | 10.27% |
| 4-(2,2-difluoro-1,3-benzodioxol-4-yl)-1H-pyrrole-3-carbonitrile | Fludioxonil | 131341-86-1 | 5.21% |
| 3-(2-chloro-1,3-thiazol-5-ylmethyl)-5-methyl-1,3,5-oxadiazinan-4-ylidene(nitro)amine | Thiamethoxam | 153719-23-4 | 20.83% |

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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:

Not Applicable

Indication of immediate medical attention and special treatment needed:

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.

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 outlined in Section 8. 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.

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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:

Not Applicable

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 |
|-------------------|--|-----------------|--------------------------|----------------|
| Glycerin | 15 mg/m ³ TWA (total); 5 mg/m ³ TWA (respirable) | Not Established | Not Established | Not Applicable |
| Propylene Glycol | Not Established | Not Established | 10 mg/m ³ TWA | AIHA |
| Other ingredients | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| Difenoconazole | Not Established | Not Established | 5 mg/m ³ TWA | Manufacturer |
| Fludioxonil | Not Established | Not Established | 5 mg/m ³ TWA | Syngenta |
| Thiamethoxam | Not Established | Not Established | 3 mg/m ³ TWA | Syngenta |

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.

Skin Contact:

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

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 certified respirator with any N, R, P or HE filter.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light beige opaque liquid
Odor: Aromatic
Odor Threshold: Not Available
pH: 5.0 - 6.5 (as is @ 68 - 77°F (20 - 25°C))
Melting point/freezing point: Not Available
Initial boiling point and boiling range: Not Available
Flash Point (Test Method): Not Available
Flammable Limits (% in Air): Not Available
Flammability: Not Available
Vapor Pressure: Difenoconazole 2.5 x 10⁽⁻¹⁰⁾ mmHg @ 77°F (25°C)
Fludioxonil 2.9 x 10⁽⁻⁹⁾ mmHg @ 77°F (25°C)
Thiamethoxam 2 x 10⁽⁻¹¹⁾ mmHg @ 68°F (20°C)
Vapor Density: Not Available
Relative Density: 1.19 g/ml ; 9.889 lbs/gal @ 68°F (20°C)
Solubility (ies): Difenoconazole 15 mg/l @ 77°F (25°C)
Fludioxonil 1.8 mg/l @ 77°F (25°C)
Thiamethoxam 4.1 g/l @ 77°F (25°C)
Partition coefficient: n-octanol/water: Not Available
Autoignition Temperature: Not Available
Decomposition Temperature: Not Available
Viscosity: Not Available
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: Not Available
Incompatible materials: None known.
Hazardous Decomposition Products: Not Available

11. TOXICOLOGICAL INFORMATIONHealth effects information

Likely routes of exposure: Dermal, Inhalation
Symptoms of exposure: Not Applicable
Delayed, immediate and chronic effects of exposure: Not Applicable

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

Ingestion: Oral (LD50 Female Rat) : 3129 mg/kg body weight
 Dermal: Dermal (LD50 Rat) : > 5000 mg/kg body weight
 Inhalation: Inhalation (LC50 Rat) : > 2.57 mg/l air - 4 hours
 Eye Contact: Minimally Irritating (Rabbit)
 Skin Contact: Slightly Irritating (Rabbit)
 Skin Sensitization: Not a Sensitizer (Guinea Pig)

Reproductive/Developmental Effects

Difenoconazole: None observed.
 Fludioxonil: Delayed development at doses causing maternal toxicity.
 Thiamethoxam: Developmental: Not teratogenic in rats or rabbits.
 Reproductive: No effects on reproduction. Minor increase in a common testis effect in rats at high doses, which did not affect reproduction.

Chronic/Subchronic Toxicity Studies

Difenoconazole: Kidney and liver effects at high doses (>5000 ppm; rats); Eye effects in dogs at high dose levels.
 Fludioxonil: Liver and kidney toxicity at high dose levels.
 Thiamethoxam: Subchronic: Liver effects occurred in rodents only at high dose levels. Not neurotoxic after high acute and subchronic exposure in rats.

Carcinogenicity

Difenoconazole: Did not show carcinogenic effects in animal experiments.
 Fludioxonil: Marginal increase (7%) of liver tumors (female, rats: 3,000 ppm); Within historical control range (1 to 10%).
 Thiamethoxam: Classified as "not likely to be carcinogenic in humans" based on lifetime studies in mice and rats.

| Chemical Name | NTP/IARC/OSHA Carcinogen |
|---------------|--------------------------|
|---------------|--------------------------|

| | |
|---|----|
| Glycerin | No |
| 1,2-Propanediol | 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 |
| 4-(2,2-difluoro-1,3-benzodioxol-4-yl)-1H-pyrrole-3-carbonitrile | No |
| 3-(2-chloro-1,3-thiazol-5-ylmethyl)-5-methyl-1,3,5-oxadiazinan-4-ylidene(nitro)amine | No |

Other Toxicity Information

None

Toxicity of Other Components

Glycerin

Repeated or prolonged exposure to concentrated solutions may result in dermatitis.

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Other ingredients
Not Applicable

Propylene Glycol

Reported to cause central nervous system depression (anesthesia, dizziness, confusion), headache and nausea. Also, eye irritation may occur with lacrimation but no residual discomfort or injury. Prolonged contact to skin may cause mild to moderate irritation and possible allergic reactions. Chronic dietary exposure caused kidney and liver injury in experimental animals.

Target Organs

Active Ingredients

| | |
|-----------------|--|
| Difenoconazole: | Brain, liver, kidney, gastrointestinal tract |
| Fludioxonil: | Liver, kidney |
| Thiamethoxam: | Liver |

Inert Ingredients

| | |
|--------------------|--------------------|
| Glycerin: | Skin |
| Other ingredients: | Not Applicable |
| Propylene Glycol: | CNS, kidney, liver |

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/

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

Thiamethoxam:

Fish (Rainbow Trout) 96-hour LC50 > 100 ppm
Bird (Mallard Duck) LD50 Oral 576 mg/kg
Invertebrate (Daphnia Magna) 48-hour EC50 > 106 ppm
Green Algae 4-day EC50 > 97 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).

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).

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Thiamethoxam:

The information presented here is for the active ingredient, thiamethoxam.
Not persistent in soil. Stable in water. Moderate mobility in soil. Floats 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
Not regulated

Comments

Water Transport - International
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Difenoconazole, Fludioxonil), Marine Pollutant
Hazard Class: Class 9
Identification Number: UN 3082
Packing Group: PG III

Air Transport

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

Caution: Harmful if swallowed, absorbed through the skin, or inhaled. Causes moderate eye irritation. Avoid breathing vapors. 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):

100-1444

EPCRA SARA Title III Classification:

Section 311/312 Hazard Classes: Acute Health Hazard

Section 313 Toxic Chemicals: None

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CERCLA/SARA 304 Reportable Quantity (RQ):
 Not Applicable
 RCRA Hazardous Waste Classification (40 CFR 261):
 Not Applicable
 TSCA Status:
 Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 1
 Flammability: 1
 Instability: 0

HMIS Hazard Ratings

Health: 1
 Flammability: 1
 Reactivity: 0

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

Syngenta Hazard Category: A

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 3/22/2012
 Revision Date: 7/16/2015 Replaces: 3/10/2015
 Section(s) Revised: 2, 4, 11, 16

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.