

## SIERRA HERBICIDE

Date: 3/10/2015  
Replaces: N/A

### 1. PRODUCT IDENTIFICATION

Product identifier on label: **SIERRA HERBICIDE**  
Product No.: A19074A  
Use: Herbicide  
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: Inhalation: Category 3  
Skin Sensitizer: Category 1B  
Signal Word (OSHA): Warning  
Hazard Statements: May cause an allergic skin reaction  
Toxic if inhaled

Hazard Symbols:



Precautionary Statements: Avoid breathing mist, vapors, spray.  
Use only outdoors or in a well-ventilated area.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves, protective clothing, eye protection.  
If on skin: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical advice.  
If inhaled: Remove person to fresh air and keep comfortable for breathing.  
Call a poison center, doctor or Syngenta.  
See Section 4 First Aid Measures.  
Wash contaminated clothing before reuse.  
Store locked up.  
Dispose of contents and container in accordance with local regulations.

Other Hazard Statements: None

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	Common Name	CAS Number	Concentration
Cloquintocet-Mexyl	Cloquintocet-Mexyl	99607-70-2	<10.0%
Other ingredients	Other ingredients	Trade Secret	>55.0%
4,5-dihydro-3-methoxy-4-methyl-5-oxo-N- {{2-(trifluoromethoxy)-phenyl}sulfonyl}-1H- 1,2,4-triazole-1-carboxamide), sodium salt	Flucarbazone-Sodium	181274-17-9	35.0%

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 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:

Allergic skin reaction

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.

**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.

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**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.

**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
Cloquintocet-Mexyl	Not Established	Not Established	5 mg/m <sup>3</sup> TWA	Syngenta
Other ingredients	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Flucarbazone-Sodium	Not Established	Not Established	Not Established	

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 (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear.

Inhalation:

A combination particulate/organic vapor respirator should be used until effective engineering controls are installed to

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comply with occupational exposure limits, or until exposure limits are established. Use a NIOSH certified respirator with an organic vapor (OV) cartridge or canister with any 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: Beige viscous liquid

Odor: Slight musty odor

Odor Threshold: Not Available

pH: Not Available

Melting point/freezing point: Not Applicable

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: Flucarbazone-Sodium 7.5 x 10(-9) mmHg @ 68°F (20°C)

Vapor Density: Not Available

Relative Density: 1.13 g/ml

Solubility (ies): Flucarbazone-Sodium 44 g/l (pH 4-9, 68°F)

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: None known.

Incompatible materials: None known.

Hazardous Decomposition Products: None known.

### 11. TOXICOLOGICAL INFORMATION

#### Health effects information

Likely routes of exposure: Dermal, Inhalation

Symptoms of exposure: Not Applicable

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Delayed, immediate and chronic effects of exposure: Allergic skin reaction

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

Ingestion: Oral (LD50 Rat) : > 2000 mg/kg body weight  
 Dermal: Dermal (LD50 Rat) : > 2000 mg/kg body weight  
 Inhalation: Inhalation (LC50 Rat) : > 0.935 mg/l air - 4 hours  
 Eye Contact: Non-Irritating (Rabbit)  
 Skin Contact: Non-Irritating (Rabbit)  
 Skin Sensitization: A mild skin sensitizer in animal tests.

Reproductive/Developmental Effects

Flucarbazone-Sodium: No evidence for any genotoxic or teratogenic potential.

Chronic/Subchronic Toxicity Studies

Flucarbazone-Sodium: No evidence for any neurotoxic potential.

Carcinogenicity

Flucarbazone-Sodium: No evidence for any carcinogenic potential.

Chemical Name	NTP/IARC/OSHA Carcinogen
Cloquintocet-Mexyl	No
Other ingredients	No
4,5-dihydro-3-methoxy-4-methyl-5-oxo-N-{{2-(trifluoromethoxy)-phenyl}sulfonyl}-1H-1,2,4-triazole-1-carboxamide), sodium salt	No

Other Toxicity Information

None

Toxicity of Other Components

Cloquintocet-Mexyl

Causes mild eye and skin irritation. Toxic if inhaled or swallowed. May cause sensitization by skin contact.

Other ingredients

Not Applicable

Target Organs

Active Ingredients

Flucarbazone-Sodium: Not Applicable

Inert Ingredients

Cloquintocet-Mexyl: Eye, skin, lung, digestive tract

Other ingredients: Not Applicable

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### 12. ECOLOGICAL INFORMATION

#### Eco-Acute Toxicity

##### Flucarbazono-Sodium:

Fish (Bluegill Sunfish) 96-hour LC50 > 99.3 mg/l

Bird (Bobwhite Quail) LD50 Oral > 2000 mg/kg

Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 > 109 mg/l

Green Algae EC50 6.4 mg/l

#### Environmental Fate

##### Flucarbazono-Sodium:

The information presented here is for the active ingredient, flucarbazono-sodium.

Soil/Environment: Average soil DT50 17 d. Photolytic DT50 in soil and water >500 d. Not mobile in soil; in dissipation studies, no product residues detected below 30 cm.

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### 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

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### 14. TRANSPORT INFORMATION

#### DOT Classification

Ground Transport - NAFTA

Not regulated

#### Comments

Water Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Cloquintocet-Mexyl), 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. (Cloquintocet-Mexyl)

Hazard Class: Class 9

Identification Number: UN 3082

Packing Group: PG III

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### 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:

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Caution: Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing.

EPA Registration Number(s):  
 66330-391-100

EPCRA SARA Title III Classification:

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

Section 313 Toxic Chemicals: None

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: 2  
 Flammability: 1  
 Instability: 0

HMIS Hazard Ratings

Health: 2  
 Flammability: 1  
 Reactivity: 0

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

Syngenta Hazard Category: C,S

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 1/31/2011

Revision Date: 3/10/2015

Replaces:

Section(s) Revised: 1-16

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.