

## MERIDIAN® 0.33G

Date: 6/5/2015  
Replaces: 7/24/2014

### 1. PRODUCT IDENTIFICATION

Product identifier on label: **MERIDIAN® 0.33G**  
Product No.: A12195C  
Use: Insecticide  
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: Eye Damage/Irritation: Category 2B  
Carcinogenicity: Category 1A  
Reproductive Toxicity: Category 1B  
Specific Target Organ Toxicity: Repeated Category 1

Signal Word (OSHA): Danger

Hazard Statements: Causes eye irritation  
May cause cancer  
May damage fertility or the unborn child  
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.  
Wear protective gloves, protective clothing, eye protection.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If exposed or concerned: Call a poison center, doctor or Syngenta.  
Get medical advice if you feel unwell.  
If eye irritation persists: Get medical advice.  
Store locked up.

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Dispose of contents and container in accordance with local regulations.

Other Hazard Statements: May form combustible dust concentrations in air.

**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
Attapulgite Clay	Attapulgite Clay	12174-11-7	Trade Secret
n-Methylpyrrolidone	n-Methylpyrrolidone	872-50-4	< 5%
Other ingredients	Other ingredients	Trade Secret	94.67%
3-(2-chloro-1,3-thiazol-5-ylmethyl)-5-methyl-1,3,5-oxadiazinan-4-ylidene(nitro)amine	Thiamethoxam	153719-23-4	0.33%

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. Have the person sip a glass of water if able to swallow. 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.

**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.

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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:

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:

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/m <sup>3</sup> /(%SiO <sub>2</sub> +2) (respirable dust)	0.025 mg/m <sup>3</sup> (respirable silica)	0.05 mg/m <sup>3</sup> (respirable dust)	NIOSH
Attapulgite Clay	Not Established	Not Established	Not Established	Not Applicable
n-Methylpyrrolidone	Not Established	Not Established	10 ppm TWA, Skin	AIHA
Other ingredients	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Thiamethoxam	Not Established	Not Established	3 mg/m <sup>3</sup> 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.

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### Eye Contact:

Where eye contact is likely, use dust-proof chemical 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, 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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Tan, free flowing granules

Odor: Not Available

Odor Threshold: Not Available

pH: 7 - 9 (1% solution in H<sub>2</sub>O @ 77°F (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: Thiamethoxam 2 x 10<sup>-11</sup> mmHg @ 68°F (20°C)

Vapor Density: Not Available

Relative Density: ~ 0.5-0.6 g/ml; 31-36 lbs/ft<sup>3</sup>

Solubility (ies): 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: Not Available

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## 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.

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Hazardous Decomposition Products: Not Available

### 11. TOXICOLOGICAL INFORMATION

#### Health effects information

Likely routes of exposure: Dermal, Inhalation

Symptoms of exposure: Eye irritation

Delayed, immediate and chronic effects of exposure: Eye irritation

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

Ingestion:	Oral (LD50 Rat) :	Not Available
Dermal:	Dermal (LD50 Rat) :	Not Available
Inhalation:	Inhalation (LC50 Rat) :	Not Available
Eye Contact:	Moderately Irritating (Rabbit)	
Skin Contact:	Slightly Irritating (Rabbit)	
Skin Sensitization:	Not Available	

#### Reproductive/Developmental Effects

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

Thiamethoxam: Subchronic: Liver effects occurred in rodents only at high dose levels. Not neurotoxic after high acute and subchronic exposure in rats.

#### Carcinogenicity

Thiamethoxam: Classified as "not likely to be carcinogenic in humans" based on lifetime studies in mice and rats.

Chemical Name	NTP/IARC/OSHA Carcinogen
Crystalline Silica, Quartz and Cristobalite	IARC 1; ACGIH A2
Attapulgate Clay	IARC 2B
n-Methylpyrrolidone	No
Other ingredients	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

Attapulgate Clay

Prolonged or repeated inhalation of dust may cause a disabling, progressive pulmonary fibrosis. Inhalation hazard may not exist in the liquid form. May cause eye irritation.

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**Crystalline Silica, Quartz and Cristobalite**

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.

**Other ingredients**

Not Applicable

**n-Methylpyrrolidone**

Harmful if absorbed through the skin. May cause respiratory tract irritation. Repeated or prolonged exposure may cause drying and cracking of the skin. Possible developmental hazard.

Target Organs

Active Ingredients

Thiamethoxam: Liver

Inert Ingredients

Attapulgate Clay: Lung, eye  
 Crystalline Silica, Quartz and Cristobalite: Respiratory tract  
 Other ingredients: Not Applicable  
 n-Methylpyrrolidone: Eye, skin

### 12. ECOLOGICAL INFORMATION

**Eco-Acute Toxicity**

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**

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**

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Water Transport - International  
 Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S. (Thiamethoxam), 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. (Thiamethoxam)  
 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: Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. 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):

100-961

EPCRA SARA Title III Classification:

Section 311/312 Hazard Classes: Acute Health Hazard

Section 313 Toxic Chemicals: n-Methylpyrrolidone < 5% (CAS No. 872-50-4)

California Proposition 65:

This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

CERCLA/SARA 304 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: 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: D,S

For non-emergency questions about this product call:

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1-800-334-9481

Original Issued Date: 3/14/2007  
Revision Date: 6/5/2015 Replaces: 7/24/2014  
Section(s) Revised: 2

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