

## VELISTA

Date: 5/20/2015  
 Replaces: 1/12/2015

### 1. PRODUCT IDENTIFICATION

Product identifier on label: **VELISTA**  
 Product No.: A20744D  
 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: Repeated Category 2  
 Eye Damage/Irritation: Category 2A  
 Specific Target Organ Toxicity: Respiratory Irritation Category 3

Signal Word (OSHA): Warning

Hazard Statements: Causes serious eye irritation  
 May cause respiratory irritation  
 May cause damage to organs through prolonged or repeated exposure

Hazard Symbols:



Precautionary Statements: Do not breathe dust.  
 Wash hands and face thoroughly after handling.  
 Use only outdoors or in a well-ventilated area.  
 Wear eye protection.  
 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.  
 If inhaled: Remove person to fresh air and keep comfortable for breathing.  
 Call a poison center, doctor or Syngenta if you feel unwell.  
 Get medical advice 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.

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	Common Name	CAS Number	Concentration
Kaolin Clay	Kaolin Clay	1332-58-7	<45%
Other inert ingredients	Other inert ingredients	Trade Secret	>5%
N-[2-(1,3-dimethylbutyl)-3-thienyl]-1-methyl-3-(trifluoromethyl)-1H-pyrazole-4-carboxamide	Penthiopyrad	183675-82-3	50%

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
- Respiratory 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:

None known.

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:  
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
Kaolin Clay	15 mg/m <sup>3</sup> TWA (total); 5 mg/m <sup>3</sup> TWA (respirable)	2 mg/m <sup>3</sup> TWA (respirable)	10 mg/m <sup>3</sup> TWA (total); 5 mg/m <sup>3</sup> TWA (respirable)	NIOSH
Other inert ingredients	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Penthiopyrad	Not Established	Not Established	Not Established	Not Applicable

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

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**Inhalation:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. A NIOSH-certified combination air-purifying respirator with an N, P or R 95 or HE class filter and an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a pressure demand atmosphere-supplying respirator if there is any potential for uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: Solid

Odor: Not Available

Odor Threshold: Not Available

pH: Not Available

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: Penthiopyrad 6.43 x 10<sup>(-3)</sup> mPa (77°F)

Vapor Density: Not Available

Relative Density: Not Available

Solubility (ies): Penthiopyrad 7.53 mg/l @ 68°F (20°C)

Partition coefficient: n-octanol/water:

Autoignition Temperature: 238+/- 41°F

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: Not Available

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### 11. TOXICOLOGICAL INFORMATION

#### Health effects information

Likely routes of exposure: Dermal, Inhalation

Symptoms of exposure: Eye irritation, Respiratory irritation

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

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

Ingestion:	Oral (LD50 Rat) :	> 5,000 mg/kg body weight
Dermal:	Dermal (LD50 Rat) :	> 5,000 mg/kg body weight
Inhalation:	Inhalation (LC50 Rat) :	> 4.7 mg/l
Eye Contact:	Mildly Irritating (Rabbit)	
Skin Contact:	Non-Irritating (Rabbit)	
Skin Sensitization:	Animal test did not cause sensitization by skin contact. (Multiple species)	

#### Reproductive/Developmental Effects

Penthiopyrad: Reproductive toxicity: Animal testing did not show any effects on fertility.

Teratogenicity: The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

#### Chronic/Subchronic Toxicity Studies

Penthiopyrad: Repeated dose toxicity: The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

Oral

Multiple species

Reduced body weight gain, liver effects, thyroid effects, spleen effects, gallbladder effects, liver enlargement, immune system effects, altered blood chemistry, altered hematology, organ weight changes, decreased spleen weight, increased liver weight

#### Carcinogenicity

Penthiopyrad: Carcinogenicity: The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions.

A slight increased incidence in tumors was observed in animal studies.

Mutagenicity: Did not cause genetic damage in animals. Did not cause genetic damage in cultured bacterial cells. Genetic damage in cultured mammalian cells was observed in one laboratory test but was not observed in others.

Chemical Name	NTP/IARC/OSHA Carcinogen
Kaolin Clay	No
Other inert ingredients	No
N-[2-(1,3-dimethylbutyl)-3-thienyl]-1-methyl-3-(trifluoromethyl)-1H-pyrazole-4-carboxamide	No

#### Other Toxicity Information

Not Available

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### Toxicity of Other Components

#### Kaolin Clay

May cause eye and respiratory tract irritation.  
 Long-term exposure to high concentrations of this dust may produce x-ray evidence of dust in the lungs.  
 Continued long-term exposure may affect respiratory function in some individuals.

#### Other inert ingredients

Not Applicable

### Target Organs

#### Active Ingredients

Penthiopyrad: Not Available

#### Inert Ingredients

Kaolin Clay: Eye, respiratory tract, lung

Other inert ingredients: Not Applicable

## 12. ECOLOGICAL INFORMATION

### Eco-Acute Toxicity

#### Penthiopyrad:

Fish (Rainbow Trout) 96-hour LC50 0.386 mg/l  
 Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 2.53 mg/l  
 Green Algae 72-hour EbC50 > 1.5 mg/l

### Environmental Fate

#### Penthiopyrad:

No substantial degradation in water. In soil, degrades mainly via indirect photolysis (half-life of 6.2 days).

## 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.(Penthiopyrad) Marine Pollutant  
 Hazard Class: Class 9  
 Identification Number: UN3077  
 Packing Group: PG III

### Air Transport

Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S.(Penthiopyrad)

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Identification Number: UN3077  
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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:

Caution: Causes moderate eye irritation. Avoid contact with eyes or clothing. May be harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

EPA Registration Number(s):  
100-1534

**EPCRA SARA Title III Classification:**

Section 311/312 Hazard Classes: Acute 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:**

TSCA R & D Exempt

### 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: B,S

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 1/12/2015  
Revision Date: 5/20/2015 Replaces: 1/12/2015  
Section(s) Revised: 4, 9

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