



# Safety Data Sheet (SDS)

Issue Date: 31-Jan-2020

Revision Date: 24-Feb-2020

Version 2

## 1. IDENTIFICATION

### Product identifier

**Product Name** **Orius 430 SC**

### Other means of identification

**SDS #** ADAMA-301

**Registration Number(s)** 33673 (*Pest Control Products Act*)

### Recommended use of the chemical and restrictions on use

**Recommended Use** Fungicide.

### Details of the supplier of the safety data sheet

#### **Registrant**

ADAMA Agricultural Solutions Canada Ltd.  
300-191 Lombard Avenue  
Winnipeg, Manitoba R3B 0X1  
1-855-264-6262

### Emergency telephone number

**Emergency Telephone** For fire, spill and/or leak contact INFOTRAC:  
1-800-535-5053 (North America) 1-352-323-3500 (International)  
For medical emergencies and health/safety inquiries, contact PROPHARMA Group:  
1-877-250-9291

## 2. HAZARD IDENTIFICATION

This chemical is a product registered by the Canadian Pest Control Products Act and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-PCPA registered chemicals. Please see Section 15 for additional information. This product has been classified according to Canada's Hazardous Product Regulations (WHMIS 2015).

**Appearance:** White viscous liquid

**Physical state:** Liquid

**Odor:** Slight aromatic odor

### Classification

Reproductive toxicity	Category 2
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### Signal Word

**Warning**

### Hazard statements

Suspected of damaging fertility or the unborn child



### Precautionary Statements - Prevention

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other hazards**

Toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Tebuconazole	107534-96-3	37.5-39.9
1,2-Benzisothiazolin-3-one	2634-33-5	<1

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

### 4. FIRST AID MEASURES

**Description of first aid measures**

<b>General Advice</b>	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Eye Contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Seek medical advice.
<b>Skin Contact</b>	In case of contact, immediately wash skin with soap and water or water for at least 15 minutes. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial respiration. Seek medical attention for further treatment.
<b>Ingestion</b>	Do not induce vomiting, unless directed by medical personnel. Get immediate medical attention. If conscious, give 1 glass of water to dilute. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	Direct contact may cause skin or eye irritation.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray (fog).

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Not determined.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate area of unprotected personnel. Remain upwind of fire to avoid hazardous vapors and decomposition products. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

### Environmental precautions

**Environmental precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

### Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so. Dike far ahead of spill; use dry sand to contain the flow of material.

**Methods for Clean-Up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Transfer contaminated absorbent, soil, and other materials to containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Avoid breathing vapors or mists. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not contaminate water, food or feed by storage, disposal or by cleaning equipment. Open and handle container with care.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Protect from freezing. Store above 5°C in original, tightly closed container in a dry, cool and well-ventilated area without a floor drain. Store locked up. Keep out of the reach of children. Keep/store only in original container. Protect from sunlight. Protect from excessive heat. Do not use food or drink containers for mixing or storage. Do not ship or store near food, feed, seed and fertilizers.

**Packaging Materials** Do not reuse container.

**Incompatible Materials** None known.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

### Appropriate engineering controls

**Engineering Controls** Please refer to the product label. Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Use splash goggles or face shield when contact may occur.

**Skin and Body Protection** Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Viton or other impervious gloves are required. Long sleeve shirt, trousers, and safety shoes.

**Respiratory Protection** Ensure adequate ventilation, especially in confined areas. Wear an appropriate NIOSH/MSHA approved respirator if ventilation is inadequate.

**General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Take off all contaminated clothing and wash it before reuse. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Odor</b>	Slight aromatic odor
<b>Appearance</b>	White viscous liquid	<b>Odor Threshold</b>	Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks - Method</u>
pH	8.27	
Melting point / freezing point	Not determined	
Boiling point / boiling range	Not determined	
Flash point	>100°C / >212°F	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid-not applicable	
Upper flammability or explosive limits	Not determined	
Lower flammability or explosive limits	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Relative Density	Not determined	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic Viscosity	0.5227 @ 20°C; 0.4452 @ 40°C Pa s	
Explosive Properties	Not an explosive	
Oxidizing Properties	Not an oxidizer	

**Other information**

<b>Liquid Density</b>	1.10016 kg/L @ 20°C
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## 10. STABILITY AND REACTIVITY

**Reactivity**

Not reactive under normal conditions.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

None under normal processing.

**Hazardous Polymerization**

Hazardous polymerization does not occur.

**Conditions to Avoid**

See Section 7 Handling & Storage.

**Incompatible materials**

None known.

**Hazardous decomposition products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Eye Contact</b>	Avoid contact with eyes.
<b>Skin Contact</b>	Avoid contact with skin.
<b>Inhalation</b>	Avoid breathing vapors or mists.
<b>Ingestion</b>	Do not ingest.

### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Tebuconazole 107534-96-3	= 3352 mg/kg (Rat)	> 5 g/kg (Rat) > 5000 mg/kg (Rat)	> 371 mg/m <sup>3</sup> (Rat) 4 h > 5093 mg/m <sup>3</sup> (Rat) 4 h > 800 mg/m <sup>3</sup> (Rat) 4 h
1,2-Benzisothiazolin-3-one 2634-33-5	= 1020 mg/kg (Rat)	-	-

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	Please see section 4 of this SDS for symptoms.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Carcinogenicity</b>	Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
<b>Reproductive toxicity</b>	Suspected of damaging fertility or the unborn child.

### Numerical measures of toxicity

**Acute Oral LD50 (Rat):** >2,000 mg/kg

**Acute Dermal LD50 (Rabbit):** >2,000 mg/kg

**Acute Inhalation LC50 (Rat):** >5.23 mg/L (4-hr)

**Eye Irritation:** Slightly irritating.

**Dermal Irritation:** Non-irritating.

**Dermal Sensitization:** Not a skin sensitizer.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Toxic to aquatic life with long lasting effects. This pesticide is toxic to estuarine and marine invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

### Persistence/Degradability

Not determined.

### Bioaccumulation

There is no data for this product.

### Mobility

Chemical name	Partition coefficient
1,2-Benzisothiazolin-3-one 2634-33-5	1.3

### Other Adverse Effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected.

### 13. DISPOSAL CONSIDERATIONS

#### Waste Treatment Methods

##### **Disposal of Wastes**

Follow container label instructions for disposal of wastes generated during use in compliance with the product label.  
Dispose in accordance with all local, state/provincial and federal regulations.

##### **Contaminated Packaging**

Follow advice on product label.  
Do not re-use empty containers.  
Triple rinse containers.  
Puncture container to avoid re-use.  
Consult provincial and local regulations regarding the proper disposal of container.

### 14. TRANSPORT INFORMATION

#### Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

#### DOT

<b>UN/ID No</b>	UN3082
<b>Proper Shipping Name</b>	Environmentally hazardous substances, liquid, n.o.s. (Tebuconazole)
<b>Hazard class</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Yes

49 CFR §171.4 Not regulated when transported on land by motor vehicle or rail car in non-bulk containers (119 Gal, 450 Liters).

#### IATA

<b>UN number</b>	UN3082
<b>Proper Shipping Name</b>	Environmentally hazardous substances, liquid, n.o.s. (Tebuconazole)
<b>Transport hazard class(es)</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Yes

#### IMDG

<b>UN number</b>	UN3082
<b>Proper Shipping Name</b>	Environmentally hazardous substances, liquid, n.o.s. (Tebuconazole)
<b>Transport hazard class(es)</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Yes

#### TDG

<b>UN/ID No</b>	UN3082
<b>Proper Shipping Name</b>	Environmentally hazardous substance, liquid, n.o.s. (Tebuconazole)
<b>Hazard class</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Yes

Section 1.45.1 of the TDG Regulations provides an exemption from documentation and safety marks only for this product and only when transported by road or railway vehicle.

## 15. REGULATORY INFORMATION

### International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Tebuconazole	X			X	X	X	X	
1,2-Benzisothiazolin-3-one	X	X	X	X	X	X	X	X

### **Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

*AICS - Australian Inventory of Chemical Substances*

There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

### **Hazardous Products Regulations Information:**

This product has been classified in accordance with the amended Hazardous Products Act (HPA) and the Hazard Criteria of the Hazardous Products Regulations (HPR), and the SDS contains all the information required by the HPR.

### **Hazardous Products Act Information:**

Pest control products, as defined in subsection 2(1) of the Pest Control Products Act (PCPA), are excluded from the application of the Hazardous Products Act (that is, pest control products are exempt from the supplier labelling and SDS requirements of the Hazardous Products Act and Regulations). This product has voluntarily been classified according to the WHMIS 2015 standard.

### **US Federal Regulations**

Not applicable

### **US State Regulations**

Not applicable

### **Pest Control Products Act Registration Number:** 33673

Read the approved label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.

### **Product Statement**

This chemical is a pest control product registered and regulated by Health Canada's Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. The following is the hazard information required on the pest control product label:

### **PCPA Label Hazard Communications**

Signal Word: Caution

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, and 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.

### **Difference Between SDS and Pest Control Products Act Label**

	PCPA	SDS
<b>Signal Word</b>	Caution	Warning
Acute toxicity - Oral	Harmful if swallowed	N/A
Acute toxicity - Dermal	Harmful if absorbed through the skin	N/A
Serious eye damage/eye irritation	Causes moderate eye irritation	N/A
Reproductive toxicity	N/A	Suspected of damaging fertility or the unborn child

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	1	1	1	None
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical hazards</b>	<b>Personal Protection</b>
	1	1	1	See Section 8

**Issue Date:** 31-Jan-2020  
**Revision Date:** 24-Feb-2020  
**Revision Note:** Updates to format, Changes to Section 7, 13-15

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**