

Issue Date: 31-Jan-2020

Version 2

1. IDENTIFICATION

<u>Product identifier</u> 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 Recommended Use	and restrictions on use Insecticide.
Details of the supplier of the safety Manufacturer Address ADAMA Agricultural Solutions Canada 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 (1-877-250-9291

2. HAZARDS IDENTIFICATION

This chemical is a product registered by the Canadian Pest Control Products Act (CPCPA) 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. This product has been classified according to Canada's Hazardous Product Regulations (WHMIS 2015). Please see CPCPA label for additional information.

Appearance White viscous liquid

Physical state Liquid

Odor Slight aromatic odor

Category 2

Group:

Classification

Reproductive toxicity

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

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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

4. FIRST AID MEASURES

Description of first aid measures

General Advice	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Seek medical advice.
Skin Contact	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.
Inhalation	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.
Ingestion	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

Symptoms Direct contact may cause skin or eye irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam. Carbon dioxide (CO2). 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 containm	ent 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	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Store at ambient conditions. Keep/store only in original container. Do not use food or drink containers for mixing or storage. Keep away from food, drink and animal feeding stuffs.
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, su	ch 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.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Color	Liquid White viscous liquid White	Odor Odor Threshold	Slight aromatic odor Not determined
<u>Property</u> pH Melting point / freezing point Boiling point / boiling range Flash point Evaporation Rate	<u>Values</u> 8.27 Not determined >100°C / >212°F Not determined	<u>Remarks • Method</u>	
Flammability (Solid, Gas) Flammability Limit in Air Upper flammability or explosive limits Lower flammability or explosive	Liquid-not applicable Not determined Not determined		
limits Vapor Pressure Vapor Density Relative Density	Not determined Not determined Not determined		
Water Solubility Solubility in other solvents Partition Coefficient Autoignition temperature Decomposition temperature	Not determined Not determined Not determined Not determined Not determined		
Kinematic viscosity Dynamic Viscosity Explosive Properties Oxidizing Properties	Not determined 0.5227 @ 20°C; 0.4452 @ 40°C Pa s Not an explosive Not an oxidizer	3	
<u>Other information</u> Liquid Density	1.10016 kg/L @ 20°C		

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 Sec. 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

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

Component Information

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

Symptoms related to the physical, chemical and toxicological characteristics

Please see section 4 of this SDS for symptoms.

Symptoms

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity	Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Reproductive toxicity	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	1.3
2634-33-5	

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		
<u>Waste Treatment Methods</u> Disposal of Wastes	Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.	
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.	
	14. TRANSPORT INFORMATION	
<u>Note</u>	Non bulk packages (less than 119 gallons/ 450 Liters):Not regulated.	
	Bulk package (more than 119 gallons/ 450 liters:.	
DOT UN/ID No Proper Shipping Name Hazard class Packing Group Marine Pollutant	UN3082 Environmentally hazardous substances, liquid, n.o.s. (Tebuconazole) 9 III Yes.	
IATA UN number Proper Shipping Name Transport hazard class(es) Packing Group Marine Pollutant	UN3082 Environmentally hazardous substances, liquid, n.o.s. (Tebuconazole) 9 III Yes	
IMDG UN number Proper Shipping Name Transport hazard class(es) Packing Group Marine Pollutant	UN3082 Environmentally hazardous substances, liquid, n.o.s. (Tebuconazole) 9 III Yes	

TDGUN/ID NoUN3082Proper Shipping NameEnvironmentaHazard class9Packing GroupIIIMarine PollutantYes

UN3082 Environmentally hazardous substance, liquid, n.o.s. (Tebuconazole) 9 III Yes

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Tebuconazole	Х				Х	Х	Х	Х	
1,2-Benzisothiazolin-3-one	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х

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 product 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 (*Pest Control Products Act*) 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 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. Read the approved label, authorized under the Pest Control Products Act, prior to using or handling the pest control product. Following is the hazard information as required on the pesticide label:

PCPA Label Hazard Communications

Please refer to EPA label for additional information

Difference between SDS and pesticide label

Please refer to EPA label for additional information

16. OTHER INFORMATION

<u>NFPA</u> HMIS	Health Hazards 1 Health Hazards 1	Flammability 1 Flammability 1	Instability 1 Physical hazards 1	Special Hazards None Personal Protection See Section 8
Issue Date: Revision Date: Revision Note:	31-Jan-2 26-Apr-2 Regulat			

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