

Preparation Date 20-Nov-2023

Revision date : 17-April-2024

Revision Number: 1

## 1. Identification of the Substance/Preparation and of the Company/Undertaking

### Identification of the product

**Product Description** Castlon

### Other means of identification

**Internal SKU** D00000623, D00000624

**UVP** DU00000012

**Specification** 102D00000175

**Registration number(s)** 70506-396-101563

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

**Recommended use** Fungicide.

**Uses advised against** Activities contrary to label recommendation  
Non labeled activities

### Details of the Supplier of the Safety Data Sheet

#### **Supplier Address**

Environmental Science U.S. LLC.  
5000 CentreGreen Way, Suite 400  
Cary NC 27513  
1-800-331-2867  
uscontact@envu.com

### Emergency Response

**Emergency telephone number** Chemtrec: (800)424-9300 (24hrs) or (703)-527-3887  
Medical: Rocky Mountain Poison and Drug Safety (866)673-6671 (24hrs)

## 2. Hazards Identification

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Vapors)

Category 4

### Label elements

#### EMERGENCY OVERVIEW

#### WARNING

#### **Hazard Statements**

HARMFUL IF INHALED



<b>Appearance</b> Viscous liquid	<b>Physical state</b> Liquid	<b>Odor</b> Slight
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**Precautionary Statements - Prevention**

Do not get in eyes, on skin, or on clothing  
Use only outdoors or in a well-ventilated area

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor if you feel unwell

**Hazards Not Otherwise Classified (HNOC)****OTHER INFORMATION**

- MAY BE HARMFUL IF SWALLOWED
- May be harmful in contact with skin

**3. Composition/information on Ingredients**

Chemical name	CAS No	Weight-%
Fluoxastrobin	361377-29-9	40.3

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

**4. First aid measures****FIRST AID MEASURES**

<b>Eye contact</b>	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 a poison control center or doctor for treatment advice.
<b>Skin contact</b>	In case of contact with substance, wipe from skin immediately; flush skin or eyes with running water for at least 20 minutes. Call a poison control center or doctor for treatment advice.
<b>Inhalation</b>	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 a poison control center or doctor for further treatment advice.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

**Most Important Symptoms and Effects, Both Acute and Delayed**

<b>Most Important Symptoms and Effects</b>	MAY CAUSE ALLERGIC SKIN REACTION.
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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**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** no data available.

**Specific hazards arising from the chemical**

No information available.

**Explosion data**

**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.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Avoid contact with skin and eyes. Use personal protective equipment. Wash thoroughly after handling.

**Environmental Precautions**

**Environmental precautions** Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Methods and material for containment and cleaning up**

**Methods for Clean-Up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

## 7. Handling and Storage

**Precautions for safe handling**

**Handling** Wear personal protective equipment. Remove and wash contaminated clothing before re-use. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Keep out of reach of children. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep in a dry, cool and well-ventilated place.

**incompatible materials** No materials to be especially mentioned.

## 8. Exposure Controls/Personal Protection

**Exposure guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering controls** Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

**Personal protective equipment**

**Eye/Face Protection**

Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields. If splashes are likely to occur, wear: Face-shield.

**Skin protection**

Wear protective gloves/clothing. Chemical resistant footwear.

**Respiratory protection**

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is

recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.

#### General hygiene considerations

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance	Viscous liquid	
Physical state	Liquid	
Odor	Slight	
color	Off-white	
<u>Property</u>	<u>VALUES</u>	<u>Remarks/ Method</u>
pH	6.8	10% solution
Melting point/freezing point		None known
Boiling Point/Range		None known
Flash Point	> 93 °C	None known
Evaporation Rate		None known
Flammability (solid, gas)		None known
Specific gravity	1.183 g/mL	
Bulk density	9.87 lb/gal	None known
Water solubility		None known
Solubility in Other Solvents	No information available	None known
Partition coefficient: n-octanol/water		None known
Autoignition temperature		None known
Decomposition temperature		None known
Viscosity	533 mPas	None known

### 9.2 OTHER INFORMATION- NONE

## 10. Stability and Reactivity

#### Reactivity

no data available

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

None under normal processing.

#### Conditions to avoid

No information available.

#### incompatible materials

No materials to be especially mentioned.

#### Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx).

## 11. Toxicological Information

### Information on Likely Routes of Exposure

<b>Product information</b>	Castlon Oral LD50 = >5000 mg/kg Acute dermal LD50 = >5000 mg/kg Acute inhalation LC50 = >2.17 mg/L/ 4hr No mortality
<b>Inhalation</b>	Harmful by inhalation.
<b>Eye contact</b>	Contact with eyes may cause irritation.
<b>Skin contact</b>	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
<b>Ingestion</b>	MAY BE HARMFUL IF SWALLOWED.

### Information on Toxicological Effects

**Symptoms** No information available.

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

<b>Sensitization</b>	May cause sensitization of susceptible persons.
<b>Mutagenic effects</b>	no data available.
<b>Carcinogenicity</b>	There are no known carcinogenic chemicals in this product.
<b>Reproductive effects</b>	Not Available.
<b>STOT - Single Exposure</b>	no data available.
<b>STOT - Repeated Exposure</b>	no data available.
<b>Aspiration hazard</b>	No information available.

### Numerical Measures of Toxicity - Product information

<b>LD50 Oral</b>	> 5000 mg/kg
<b>LD50 Dermal</b>	> 5000 mg/kg
<b>LC50 Inhalation</b>	> 8.6 mg/l ( 1 hr) No mortality

## 12. Ecological Information

### ecotoxicity

Fluoxastrobin tech  
FISH Oncorhynchus mykiss 96 hr = 0.435 mg/L  
AQUATIC ORGANISMS M bahia 96 hr = 0.053 mg/L  
DAPHNIA EC50 48 hr = 0.48 mg/L

### Persistence/Degradability

no data available.

### Bioaccumulation/ Accumulation

No information available.

### Other Adverse Effects

no data available

### 13. Disposal Considerations

#### Waste Treatment Methods

<b>Waste Disposal Method</b>	Pesticide wastes can be hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
<b>Contaminated packaging</b>	Refer to product label.

### 14. Transport Information

<b><u>DOT</u></b>	When shipped domestically by highway in non-bulk containers this product can be shipped as not regulated. When shipped in bulk, by vessel, or internationally refer to the IMDG shipping description:
<b><u>TDG</u></b>	When shipped in Canada domestic highway non-bulk this product can be shipped as Not regulated as per TDG 1.45.1 In bulk, by vessel or internationally - use IMDG description
<b><u>IATA</u></b>	Single or inner packagings less than 5L (liquid) or 5kg net (solids) are excepted from the Dangerous Goods regulations (IATA Special provision A197)
<b>UN/ID no</b>	UN3082
<b>Proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s (Fluoxastrobin)
<b>Hazard class</b>	9
<b>Packing group</b>	PG III
<b>Description</b>	Marine pollutant
<b><u>IMDG</u></b>	Single or inner packaging less than 5L (liquid) or 5 kg net (solids) are excepted from the Dangerous Goods regulations (IMDG 2.10.2.7)
<b>UN/ID no</b>	UN3082
<b>Proper shipping name</b>	Environmentally hazardous substances, liquid, n.o.s (Fluoxastrobin)
<b>Hazard class</b>	9
<b>Packing group</b>	PG III
<b>Environmental hazards</b>	Marine pollutant

### 15. Regulatory Information

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:

**signal word** CAUTION

**Prolonged or frequent repeated skin contact may cause allergic reaction in some individuals. Toxic to fish and aquatic invertebrates.**

**International Inventories**

<b>USINV</b>	Not present
<b>DSL/NDSL</b>	Not present
<b>EINECS/ ELINCS</b>	Not Present
<b>ENCS</b>	Not Present
<b>China</b>	Not Present
<b>KECL</b>	Not Present
<b>PICCS</b>	Not Present
<b>AICS</b>	Not Present
<b>TSCA</b>	Not Present

**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 Commercial Chemical Substances/EU 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

**Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**CERCLA**

Not applicable

**CERCLA**

**RCRA**

**Pesticide Information**

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Fluoxastrobin 361377-29-9 ( 40.3 )			X	

**State Regulations**

**State Right-to-Know**

**International regulations**

**U.S. EPA Label information**

EPA Pesticide registration number **70506-396** - TBD

**16. Other Information**

**NFPA**                      HEALTH 1                      flammability 0                      Instability 0                      Physical hazard -

Preparation Date                      15-Mar-2023

Revision date                              14-Aug-2023

Revision Summary

Update Section 9

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**End of SDS**