

Safety Data Sheet

section

1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name/designation : Verone

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : Plant protection product (Microbial pesticide).

Uses advised against : Any other use.

1.3 Details of the supplier of the safety data sheet

Supplier : **Name:** Agrauxine Corp.
Street: 375 Bonnewitz Avenue
Postal code/City: Van Wert, Ohio 45891
Country: USA
Telephone: +1 419-232-2461
Website: www.agrauxine.us
E-mail: fds-agx@agrauxine.lesaffre.com

1.4 Emergency Telephone Number

U.S:

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including general health concerns or pesticide incidents), call the National Pesticide Information Center (NPIC) at 1-800-858-7378 Monday - Friday, 8 AM to 12 PM Pacific Time. In the event of a medical emergency, call your poison control center at 1-800-222-1222.

section

2 Hazards identification

2.1 Classification of the substance or mixture

Hazards identification:

H320 Eye Irrit. 2B Causes eye irritation

2.2 Label elements

Hazard pictograms None.

Signal word Warning

Hazard Statements

H320 Causes eye irritation

Precautionary Statements - Prevention

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust.

P264 Wash hands, forearms and face thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves, protective clothing, eye protection, face protection.

Precautionary Statements - Response

P308+P313 IF exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage

P405 Store locked up.

Precautionary Statements - Disposal

P501 Dispose of contents/container to a hazardous or special waste collection point.

2.3 Other hazards

Not available

section

3 Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Substance	Concentration (%)	Product identifier	Classification
Trichoderma atroviride strain K5	0.68%		H315 Skin Irrit. 2 H320 Eye Irrit. 2B H335 STOT SE 3

Remark

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

Mixture containing spores of Trichoderma atroviride strain K5. Contains minimum 1.8x10E8 CFU/mL.

Full text of H- phrases: see section 16.

section

4 First aid measures

4.1 Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Following inhalation:

Move person to fresh air.

If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.

Following skin contact:

Take off contaminated clothing.

Rinse skin immediately with plenty of water for 15-20 minutes.

Call a poison control center or doctor for treatment advice.

Following eye contact:

Hold eye open and rinse slowly and gently with water for 15-20 minutes.

Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing eye.

Call a poison control center or doctor for treatment advice.

Following ingestion:

Call poison control center or doctor immediately for treatment advice.

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

Do not induce vomiting unless told to do so by the poison control center or doctor.

Do not give anything by mouth to an unconscious person.

Self-protection of the first aider:

No special measures are necessary.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

Treat symptomatically.

section 5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Carbon dioxide (CO₂).

Dry chemical.

Foam.

Water spray.

Fog.

Unsuitable extinguishing media:

Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2 Special hazards arising from the substance or mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3 Advice for firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Additional information

Do not inhale vapors and fumes.

Co-ordinate fire-fighting measures to the fire surroundings.

Move undamaged containers from immediate hazard area if it can be done safely.

Use caution when applying carbon dioxide in confined spaces. carbon dioxide can displace oxygen.

Use water spray jet to protect personnel and to cool endangered containers.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes or on clothing. Avoid all unnecessary exposure. Use PPE described in Section 8.

For Non-emergency Personnel: Use appropriate personal protection equipment (PPE) and evacuate unnecessary personnel.

For Emergency Responders: Equip cleanup crew with proper protection. Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2 Environmental precautions

Prevent entry to sewers and public waters.

Ensure that waste is collected and contained.

6.3 Methods and material for containment and cleaning up

Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams.
 Clean the contaminated area making sure not to contaminate the natural environment. Take up with suitable material and put in an appropriate container for the elimination.
 Aerate places and wash the zone of spillage with a large amount of water.
 In case of large spillage: absorb with inert material (e.g. dry sand or earth) and place in a suitable waste container.
 Use PPE described in Section 8.

6.4 Reference to other sections

Safe handling: see section 7.
 Disposal: see section 13.
 Personal protection equipment: see section 8.

Additional information

Not available

section 7 Handling and Storage

7.1 Precautions for safe handling

PROTECTIVE MEASURES:

Avoid contact with eyes, skin and clothing.
 Avoid breathing vapors, mist, spray.

Advices on general occupational hygiene:

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.
 Remove personal protection equipment immediately after handling this product. If gloves are worn, wash the outside of gloves before removing. As soon as possible, thoroughly wash and change into clean clothing.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry, cool, and well-ventilated place.
 Keep container in upright position in order to prevent leakage.
 Keep out of reach of children.

Advice on joint storage:

Keep away from food, drink and animal feedingstuffs.

7.3 Specific end uses

Seed Treatment.
 Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

section 8 Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits:

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Biological limit values:

Not available

Exposure limits at intended use:

Not available

Remark:

Not available

8.2 Exposure controls

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Technical measures and the application of suitable work processes have priority over personal protection equipment. When handlers use enclosed systems and enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607 (d) and (e)], the handler PPE requirements may be reduced or modified as specified in the WPS.

When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

Individual protection measures, such as personal protective equipment:



Eye/face protection

- : **Suitable eye protection:**
Protective eyewear.

Skin protection

- : **Hand protection:**
Suitable gloves type:
Wear chemical resistant gloves.

Body protection:

Suitable protective clothing:

Wear long sleeved shirt and long pants, shoes plus socks,.

Respiratory protection

- : **Suitable respiratory protection apparatus:**
Wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R, or P filter; OR a NIOSH-approved elastomeric particulate respirator with any R, or P filter; OR a NIOSH-approved powered air- purifying respirator with an HE filter.

Remark:

Repeated exposures to high concentrations of microbial proteins can cause allergic sensitization.

Environmental exposure controls:

No special measures are necessary.

Consumer exposure controls:

Not available

Additional information

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

section 9 Physical and chemical Properties

9.1 Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Green
Odour	: Characteristic
pH	: 6 - 7
Melting point/freezing point	: Not available
Initial boiling point and boiling range	: Not available
Flash point	: Not available
Flammability	: Not available
Upper/lower flammability or explosive limits	: Not available
Vapour pressure	: Not available
Vapour density	: Not available
Relative density	: 0.92 g/mL at 20 °C

Solubility(ies)	: Insoluble in water.
Partition coefficient n-octanol/water (log value)	: Not applicable
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
Dynamic Viscosity	: 80 cP at 20 °C
Solubility in other Solvents	: Not available
Particle characteristics	: Not applicable

9.2 Other safety information

Information concerning to the classes of physical hazards

Not available

Other security characteristics

Not available

10 Stability and Reactivity

10.1 Reactivity

Hazardous reactions will not occur under normal conditions.

10.2 Chemical stability

The product is stable when stored at normal ambient temperatures.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5 Incompatible materials

Strong oxidizers, Strong acids, Strong bases.

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

Additional information

Not available

11 Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity:

Substances:

• **Trichoderma atroviride strain K5:**

Species	: Rat
Sex	: Female
Guideline	: OCSPP 870.1100

Subendpoint	Operator	Value	Unit
LD50:	>	5000	mg/kg

Acute dermal toxicity:

No data available.

Acute inhalation toxicity:

Substances:

• **Trichoderma atroviride strain K5:**

Species	:	Rat
Sex	:	male/female
Guideline	:	OCSPP 885.3150
Route of administration	:	nasal instillation
Exposure duration/value	:	single dose
Results	:	No mortality and no infectivity. T.atroviride strain K5 is considered to be non pathogenic to rats at a limit product dose of 1.25x10E8 CFU/rat. T.atroviride strain K5 is considered to be not classified for acute inhalation toxicity.

Skin corrosion/irritation:

Substances:

• **Trichoderma atroviride strain K5:**

Test type	:	in vivo
Species	:	Rabbit
Sex	:	Male
Guideline	:	OCSPP 870.2500 + OECD 404
Exposure duration/value	:	4h

Subendpoint	Basis	Time Point	Reversibility
Erythema score	mean	Erythema spotted at 1h & 24h - no erythema at 48h & 72h	Fully reversible

Serious eye damage/irritation:

Substances:

• **Trichoderma atroviride strain K5:**

Test type	:	in vivo
Species	:	Rabbit
Sex	:	Female
Guideline	:	OCSPP 870.2400
Type of method	:	Frontal application
Concentration	:	0.1 mL at 2.15x10E10 CFU/g

Subendpoint	Basis	Time Point	Reversibility
Conjunctivae score	mean	Conjunctival redness spotted at 1h & 24h	Fully reversible within: 48h
Chemosis score	mean	Conjunctival chemosis spotted at 1h	Fully reversible within: 24h

Skin sensitisation:

No data available.

Specific target organ toxicity (repeated exposure):

No data available.

Specific target organ toxicity (single exposure):

No data available.

Carcinogenicity:

No data available.

Reproductive toxicity:

No data available.

Germ cell mutagenicity:

No data available.

Sensitisation to the respiratory tract:

No data available.

Additional information:

Not available

11.2 Information on other hazards

Not available

section 12 Ecological information
12.1 Toxicity
Substances:
Acute terrestrial toxicity:
• Trichoderma atroviride strain K5:

Animals/category	:	Honey bees
Species	:	Apis mellifera
Guideline	:	OCSPP 885.4380 + OECD 213
Test duration	:	19d

Subendpoint	Value	Unit
LD50:	> 1.39x10E6	CFU/bee
NOED:	1.39x10E6	CFU/bee

12.2 Persistence and degradability

The product has not been tested.

12.3 Bioaccumulative potential

The product has not been tested.

12.4 Mobility in soil

The product has not been tested.

12.5 Other adverse effects

Not available

Additional ecotoxicological information

Not available

section 13 Disposal considerations
13.1 Waste treatment methods
Product/Packaging disposal:
Waste treatment options:
Appropriate disposal/Product:

Dispose of waste according to the local applicable legislation.

Appropriate disposal/Package:

Dispose of waste according to the local applicable legislation.

Dispose of it with an authorized recycling or waste treatment entity, according to local requirements.

Additional information

Not available

section 14 Transport information

14.1 UN number

The product is not hazardous according to the applicable transport regulations.

14.2 UN proper shipping name

Not regulated.

14.3 Transport hazard class(es)

Not regulated.

14.4 Packing group

Not regulated.

14.5 Environmental hazards

Not regulated.

14.6 Special precautions for user

Not regulated.

14.7 Bulk shipping according to IMO instruments

Not regulated.

Additional information

Not available

section 15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This SDS has been established in accordance with HazCom 2012.

This SDS has been established in accordance with GHS regulation.

15.2 Chemical Safety Assessment

For this substance/mixture a chemical safety assessment is not required.

Additional information

FIFRA information for SDS Section 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:

Caution

No pictogram.

Causes moderate eye irritation.

section 16 Other information

Indication of changes

Not applicable (first edition of the SDS).

Abbreviations and acronyms

CAS: Chemical Abstract Service Number.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods Code.

DPD Dangerous Preparation Directive.

UN number: United Nations number.

No EC: European Commission Number.

ADN/ADNR: Regulations concerning the transport of dangerous substances in barges on the waterways.

ADR/RID: European Agreement concerning the International Carriage of Dangerous Goods by Road/Regulations concerning the international carriage of dangerous goods by rail.

CLP: Classification, labeling and packaging.

VPvB: very persistent and very bioaccumulative substances.

DOT: Department of Transportation.

HCS/HazCom: Hazard Communication.

GHS: Globally Harmonised System of Classification and Labeling of Chemicals.

Key literature references and sources for data

No data available.

Classification for mixtures and used evaluation method

The classification of the mixture is in accordance with the evaluation method described in HazCom 2012.

The classification of the mixture is in accordance with the evaluation method described in the GHS.

Relevant R-, H- and EUH-phrases (Number and full text)

H315 Skin Irrit. 2 Causes skin irritation.

H320 Eye Irrit. 2B Causes eye irritation

H335 STOT SE 3 May cause respiratory irritation

Training advice

Refer to Sections 4, 5, 6, 7 and 8 of this safety data sheet.

Additional information

Creation date: 8/5/2025

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The information given in this Safety Data Sheet is based on our present knowledge and national regulations. This Safety Data Sheet describes safety requirements relative to identified uses, it doesn't guarantee all the product properties particularly in the case of non identified uses. The product mustn't be used for any uses other than those identified under heading 1. Since the user's working conditions are not known by us, it is the responsibility of the user to take all necessary measures to comply with legal requirements for specific uses and avoid negative health effects.