SAFETY DATA SHEET



Date Issued: 8/20/2019

SDS No: VOL

VOLTERRA

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: VOLTERRA

CHEMICAL FAMILY: Nitrogen Stabilizer GENERIC NAME: Urease Inhibitor

DISTRIBUTOR

Innvictis Crop Care, LLC 1880 Fall River Drive, Suite 100 Loveland. CO 80538

24 HR. EMERGENCY TELEPHONE NUMBERS

ChemTrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Eye Irritation, Category 1 Skin Irritation, Category 3 Reproductive Toxicity, Category 1 Skin Sensitization, Category 1

GHS LABEL



Corrosion



Health hazard

SIGNAL WORD: DANGER HAZARD STATEMENTS

H316: Causes mild skin irritation. H318: Causes serious eye damage.

H317: May cause an allergic skin reaction.

H361: Suspected of damaging fertility or the unborn child.

PRECAUTIONARY STATEMENTS

General:

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

Prevention:

P201: Obtain special instructions before use.

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

P261: Avoid breathing mist, vapors or spray.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P362: Take off contaminated clothing and wash before reuse.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/physician.

P321: Specific treatment see Section 4, First Aid Measures, on this SDS.

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

Storage:

P405: Store locked up.

Disposal:

P501: Dispose of contents/container to Local, State and Federal Regulations.

POTENTIAL HEALTH EFFECTS

EYES: Causes serious eye damage.

SKIN: May cause mild irritation

INHALATION: Mist or vapors may irritate respiratory tract.

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: Suspected of damaging fertility or the unborn child.

SENSITIZATION: This product may cause an allergic skin reaction.

COMMENTS HEALTH: Read all precautions of products being handled and follow the most restrictive language for all products to provide the safest work environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Organic Solvent	>= 5 - 60	
N-(n-Butyl)thiophosphoric triamide	>= 15 - 25	94317-64-3
Proprietary Additive	>= 1 - 5	

4. FIRST AID MEASURES

EYES: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

SKIN: 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.

INGESTION: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

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 further treatment advice.

NOTES TO PHYSICIAN: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

ADDITIONAL INFORMATION: Have the product container or label with you when calling a poison control center or doctor, or going in for treatment. For emergency medical assistance call **CHEMTREC 1-800-424-9300**.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: This product will burn under fire conditions. Toxic fumes may also be emitted in a fire situation.

EXTINGUISHING MEDIA: Foam, dry chemical, carbon dioxide, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: May produce oxides of carbon or nitrogen.

EXPLOSION HAZARDS: No specific explosion hazards are identified or expected. Always fight fire with the implication that other

volatile substances may be present.

FIRE FIGHTING PROCEDURES: Evacuate area and fight fire upwind a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Explosive vapor could form from ruptured containers. Dike and collect water used to fight fire to prevent environmental damage due to runoff. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Pick up spilled liquid with absorbent material and sweep up for disposal. Place it and damaged unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state, and federal regulations for proper disposal.

LARGE SPILL: Dike around the spill area to prevent spreading. Pick up spilled material with suitable absorbent material and place in appropriate container for disposal. Place it and unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state, and federal regulations for proper disposal.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Do not contaminate any body of water. **LAND SPILL:** Avoid runoff onto any adjacent land.

SPECIAL PROTECTIVE EQUIPMENT: Always wear proper protective equipment when handling this product.

7. HANDLING AND STORAGE

HANDLING: Wash hands after handling, before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Store in a cool, dry place away from children and animals. Keep away from heat, sparks and open flame. Mix well before using. Keep container tightly closed. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Store between 70° F and 80° F.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultral pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear chemical goggles or shielded safety glasses (ANSI Z87.1 or approved equivalent) when handling and mixing product. Contact lenses should not be worn when working with chemicals.

SKIN: Wear chemical resistant gloves such as Viton or barrier laminate, Coveralls over long-sleeved shirt, long pants and chemical resistant footwear plus socks. Chemical resistant headgear for overhead exposure. When exposed to product concentrate, wear a chemical resistant apron. Always refer to the label of the pesticide(s) in the tank mix and follow the most restrictive requirements.

RESPIRATORY: Work in a well ventilated area. Avoid exposure to airborne contaminants. Wear a NIOSH/MSHA approved dust mask or filter when vapors or dust are generated above the permissable limit.

PROTECTIVE CLOTHING: Eye protection, long sleeved shirt and long pants, shoes plus socks and chemical resistant gloves. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

OTHER USE PRECAUTIONS: Avoid contact with skin, eyes, and clothing. Avoid breathing vapors. Wash thoroughly after handling product. Eye wash fountains and drench showers should be located within 100 feet or a 10 second walk from the work area per ANSI Z358.1-1990

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Slight

APPEARANCE: Liquid

COLOR: Green **pH:** > 5.5 to 7.5

PERCENT VOLATILE: Not Established

FLASH POINT AND METHOD: > (200 °F) Closed cup AUTOIGNITION TEMPERATURE: Not Established

VAPOR PRESSURE: Not Established
VAPOR DENSITY: Not Established
BOILING POINT: Not Established
FREEZING POINT: Not Established
MELTING POINT: Not Established
POUR POINT: Not Established

THERMAL DECOMPOSITION: Not Established SOLUBILITY IN WATER: Not Established EVAPORATION RATE: Not Established

DENSITY: 9.25 - 9.92 lbs/gal.

SPECIFIC GRAVITY: 1.11 to 1.19 g/mL

VISCOSITY: Not Established

MOLECULAR WEIGHT: Not Established

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Heat, open flame, sparks and static electricity. **INCOMPATIBLE MATERIALS:** Strong acids and oxidizing agents.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: > 2000 mg/kg **ORAL LD**₅₀: > 2000 mg/kg

INHALATION LC50: Not Established

EYE EFFECTS: Causes serious eye damage. **SKIN EFFECTS:** May cause mild irritation

CARCINOGENICITY

Chemical Name	NTP	IARC	OSHA
	Status	Status	Status
N-(n-Butyl)thiophosphoric triamide	Not Listed	Not Listed	Not Listed

Notes: Not listed in OSHA, NTP, IARC or ACGIH

SENSITIZATION: This product may cause an allergic skin reaction.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Ecotoxicity information is not available. This product is not for use in aquatic settings.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Do not reuse product containers. Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to http://www.acrecycle.org/ for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by local, state, and federal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated by DOT

PRIMARY HAZARD CLASS/DIVISION: Not regulated by DOT

UN/NA NUMBER: None PACKING GROUP: None

PLACARDS: None

LABEL: None

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Not Listed

FIRE: No PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes CHRONIC: No

313 REPORTABLE INGREDIENTS: Not Listed

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Not Listed
TSCA (TOXIC SUBSTANCE CONTROL ACT)

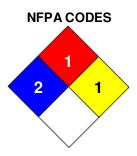
Chemical Name	CAS	
N-(n-Butyl)thiophosphoric triamide	94317-64-3	

CALIFORNIA PROPOSITION 65: Not Listed

16. OTHER INFORMATION

REASON FOR ISSUE: New Product

PREPARED BY: Lighthouse Product Services LLC



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