

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Trivictin

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Fertilizer

1.3. Supplier

INNICTIS® BIOSCIENCE
PLANT HEALTH TECHNOLOGIES
P.O. Box 9296
Boise ID 83707, - USA
T 855-466-8428

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Corrosion/Irritation, Category 1B
Eye Damage/Irritation, Category 1
Carcinogenicity, Category 2
Reproductive toxicity, Category 1

H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H351 Suspected of causing cancer.
H360 May damage fertility of the unborn child.

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
H351 - Suspected of causing cancer.
H360 - May damage fertility or the unborn child.

Precautionary Statements (GHS US)

: P260 - Do not breathe fume/gas/mist/vapors/spray.
P264 - Wash hands, face and other affected areas thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P281 - Use personal protective equipment as required.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 - Wash contaminated clothing before reuse.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310 - Immediately call a poison center or doctor/physician.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P405 - Store locked up.
P501 Dispose of contents/container to Local, State and Federal Regulation.

2.3. Other hazards which do not result in classification

No additional information available

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2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical name	CAS No	Weight-%
Alkyl substituted sulfanyl	Proprietary	Proprietary
N-(n-butyl)-thiophosphoric triamide	94317-64-3	1-5
Alkanolamine	Proprietary	Proprietary
Maleated polymer	Proprietary	Proprietary

**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. **

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
First-aid measures after skin contact	: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a poison center or doctor/physician.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms and effects (acute and delayed)

Potential adverse human health effects and symptoms	:Based on available data, the classification criteria are not met.
Symptoms/effects	:May damage fertility or the unborn child.
Symptoms/effects after skin contact	:Causes severe skin burns.
Symptoms/effects after eye contact	:Causes severe eye damage.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media	: Not determined.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Not determined
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5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. Personal Precautions

Use personal protective equipment as required.

6.2. Environmental precautions

See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

- Methods for Containment : Prevent further leakage or spillage if safe to do so.
- Methods for cleaning up : Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions/Advice for safe handling : Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up..
- Incompatible Materials : None Known on information supplied

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Trade Secret	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m ³ (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m ³ (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m ³	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m ³ STEL: 6 ppm STEL: 15 mg/m ³

8.2. Appropriate engineering controls

- Appropriate engineering controls : Apply technical measures to comply with the occupational exposure limits.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Wear eye/face protection. Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and body protection:

Wear protective gloves and protective clothing. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Refer to 29 CFR 1910.134 for respiratory protection requirements.

Personal protective equipment symbol(s):



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Color characteristic liquid
Colour	: Characteristic
Odour	: Sulfurous, ammonia-like
Odour threshold	: Not determined
pH	: 10-11
Melting point	: Not determined
Freezing point	: Not determined
Boiling point	: Not determined
Flash point	: Not determined
Relative evaporation rate (butylacetate=1)	: Not determined
Flammability (solid, gas)	: Not determined
Liquid Density	: 1.16 g/mL
Vapour pressure	: Not determined
Relative vapour density at 20 °C	: Not determined
Relative density	: Not determined
Solubility	: Not determined
Partition coefficient n-octanol/water (Log Pow)	: Not determined
Auto-ignition temperature	: Not determined
Decomposition temperature	: Not determined
Viscosity, kinematic	: Not determined
Viscosity, dynamic	: Not determined
Explosive limits	: Not determined
Explosive properties	: Not determined
Oxidising properties	: Not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

None known under normal conditions processing.

10.4. Conditions to avoid

Keep out of reach of children.

10.5. Incompatible materials

None known based on information available.

10.6. Hazardous decomposition products

None known based on information available.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects/routes of entry

Acute toxicity (oral) : Not classified.

Acute toxicity (dermal) : Not classified.

Acute toxicity (inhalation) : Not classified.

Alkyl substituted sulfinyl	
LD50 oral rat	= 14500 mg/kg = 28300 mg/kg
LD50 dermal rat	= 40 g/kg
LC50 Inhalation	>5.33 mg/L 4h

Dicyandiamide (461-58-5)	
LD50 oral rat	> 2000 mg/kg

N-(n-butyl)-thiophosphonic triamide (94317-64-3)	
LD50 oral rat	> 2823 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Alkanolamine	
LD50 oral rat	=1720 mg/kg
LD50 dermal rabbit	=1mL/kg=1000mg/kg

Skin corrosion/irritation	:	Causes severe skin burns.
Serious eye damage/irritation	:	Causes serious eye damage.
Respiratory or skin sensitization	:	Not classified.
Germ cell mutagenicity	:	Not classified.
Carcinogenicity	:	Suspected of causing cancer.
Reproductive toxicity	:	May damage fertility or the unborn child.
STOT-single exposure	:	Not classified.
STOT-repeated exposure	:	Not classified.
Aspiration hazard	:	Not classified.
Viscosity, kinematic	:	No data available.
Potential adverse human health effects and symptoms/effects	:	Based on available data, the classification criteria are not met.
Symptoms/effects after inhalation	:	Not classified.
Symptoms/effects after skin contact	:	Causes severe skin burns.
Symptoms/effects after eye contact	:	Causes severe eye damage.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
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Chemical Name	Algae/aquatic plants	Fish	Crustacea
Alkyl substituted sulfinyl	12350 - 25500: 96 h Skeletonema costatum mg/L EC50	4000: 96 h Pimephales promelas mg/L LC50 33 - 37: 96 h Oncorhynchus mykiss g/L LC50 static 41.7: 96 h Cyprinus carpio g/L LC50 40: 96 h Lepomis macrochirus g/L LC50 static	7000: 24 h Daphnia species mg/L EC50
N-(n-butyl)-thiophosphoric triamide 94317-64-3		1140: 96 h Lepomis macrochirus mg/L LC50 static	
Alkanolamine	15: 72 h Desmodesmus subspicatus mg/L EC50	300 - 1000: 96 h Lepomis macrochirus mg/L LC50 static 227: 96 h Pimephales promelas mg/L LC50 flow-through 200: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 3684: 96 h Brachydanio rerio mg/L LC50 static 114 - 196: 96 h Oncorhynchus mykiss mg/L LC50 static	65: 48 h Daphnia magna mg/L EC50

12.2. Persistence and degradability

Not determined

12.3. Bioaccumulative potential

There is no data for this product.

12.4. Mobility in soil

Chemical Name	Partition coefficient
Alkyl substituted sulfinyl	-2.03
Alkanolamine	-1.91

12.5. Other adverse effects

Not determined.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Ecology - waste materials	: Avoid unintentional release to the environment.

SECTION 14: Transport information

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

UN/ID No	UN1760
Proper Shipping Name	Corrosive Liquid, n.o.s. (N-(n-butyl)thiophosphoric triamide, contains alkanolamine)
Hazard class	8
Packing Group	II

ON 15: Regulatory information

15.1. US Federal regulations

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

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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

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

15.2. US State regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Trade Secret	x	-	-
Trade Secret	x	x	x

15.3. International regulations

Chemical Name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS
Trade Secret	x	Active	x	x
Dicyandiamide	x	Active	x	x
N-(n-butyl)-thiophosphoric triamide	x	Active	x	x
Trade Secret	x	Active	x	x
Trade Secret	x	Active	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

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.