



Maxunitech North America, Inc.

SAFETY DATA SHEET

Issue Date 30-Dec-2022

Revision Date 30-Dec-2022

Version #5

1. IDENTIFICATION

Product identifier

Product Name Maxunitech® Prothio + Teb EC

Other means of identification

Synonyms

PROTHIOCONAZOLE: 2-[2-(1-chlorocyclopropyl)-3-(2-chlorophenyl)-2-hydroxypropyl]-1,2-dihydro-3*H*-1,2,4-triazole-3-thione (CAS name); 2-[(2*RS*)-2-(1-chlorocyclopropyl)-3-(2-chlorophenyl)-2-hydroxypropyl]-2*H*-1,2,4-triazole-3(4*H*)-thione (IUPAC name)
TEBUCONAZOLE: (±)-α-[2-(4-chlorophenyl)ethyl]-α-(1,1-dimethylethyl)-1*H*-1,2,4-triazole-1-ethanol (CAS name); (*RS*)-1-*p*-chlorophenyl-4,4-dimethyl-3-(1*H*-1,2,4-triazol-1-ylmethyl)pentan-3-ol (IUPAC name)

Registration Number(s) PCP No. 34128

Recommended use of the chemical and restrictions on use

Recommended Use Fungicide
Uses advised against Use according to label

Supplier's details

Maxunitech North America, Inc.
11601 Shadow Creek Pkwy, Suite 111-573
Pearland, TX 77584, USA

Emergency telephone number

Company Phone Number 1-855-462-9621

Emergency Telephone For spills or transportation accidents, Chemtrec, 1-800-424-9300.

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (GHS Rev.9)

Acute oral- Category 5
Acute dermal- Category 5
Eye irritation - Category 2/2A
Skin irritation - Category 2
Specific target organ toxicity - single exposure: Category 3
Reproductive toxicity: Category 2
Hazardous to aquatic environment, acute -Category 1
Hazardous to aquatic environment, chronic -Category 1

GHS label elements, including precautionary statements



Pictograms

Signal word Warning



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Hazard statement(s)

H303 May be harmful if swallowed.
 H313 May be harmful in contact with skin.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation
 H335 May cause respiratory irritation
 H361 Suspected of damaging fertility or the unborn child
 H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s) Prevention

P203 Obtain, read and follow all safety instructions before use.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264 Wash hands thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection

Precautionary statement(s) Response

P301+ P317 IF SWALLOWED: Get medical help.
 P302 + P317 IF ON SKIN: Get medical help.
 P302 + P352 IF ON SKIN: Wash with plenty water.
 P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P318 IF exposed or concerned, get medical advice.
 P319 Get medical help if you feel unwell
 P321 Specific treatment (see 4 FIRST AID MEASURES on this label)
 P332 + P317 If skin irritation occurs: Get medical help.
 P337 + P317 If eye irritation persists: Get medical help.
 P362 + P364 Take off contaminated clothing and wash it before reuse.
 P391 Collect spillage.

Precautionary statement(s) Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.

Precautionary statement(s) Disposal

P501: Dispose of contents/container in according with local regulation.

Other hazards which do not result in classification

Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Name	CAS No.	%
Prothioconazole	178928-70-6	12.5
Tebuconazole	107534-96-3	12.5
N,N-Dimethyl decanamide	14433-76-2	<65.0

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

4. FIRST AID MEASURES



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Description of necessary first aid measures

General advice	Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.
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 centre or doctor for further treatment advice.
Eye contact	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.
Skin contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.
Ingestion	Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms	No symptoms known or expected.
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Indication of immediate medical attention and special treatment needed

Treatment	Treat symptomatically. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. There is no specific antidote.
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5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media

Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable	High volume water jet.

<u>Special hazards arising from the chemical</u>	In the event of fire the following may be released: Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Sulphur oxides, Nitrogen oxides (NOx).
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Advice for fire-fighters

Special protective equipment for fire-fighters	In the event of fire and/or explosion do not breathe fumes. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
Additional instruction	Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.
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<u>Environmental precautions</u>	Keeping away from drains, surface and ground water.
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Methods and materials for containment and cleaning up

Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.
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7. HANDLING AND STORAGE



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Precautions for safe handling

Advice on safe handling

Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Hygiene measures

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in original container. Keep containers tightly closed in a dry, cool and well ventilated place. Store in a place accessible by authorized persons only.

Advice on common storage

Keep away from food, drink and animal feedings.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate engineering controls

Engineering controls

Use adequate general or local exhaust ventilation. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Individual protection measures, such as personal protective equipment

General Protection

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

Eye/Face Protection

Chemical resistant goggles must be worn.

Hand protection

Chemical resistant nitrile rubber gloves.

Body Protection

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

Respiratory protection

When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light brown to tan liquid
Physical State	Liquid
Color	Light brown to tan
Odor	Slight odor
Odor threshold	No information available
pH	5 - 7 (1% solution)
Density	0.9 - 1.1g/cm ³ (20 °C)
Melting point/freezing point	Not applicable
Boiling Point/Range	No information available
Flash point	> 148 °C
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Water solubility	No information available



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Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Molecular weight	No information available

10. STABILITY AND REACTIVITY

Reactivity

Thermal decomposition Stable under normal conditions.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions No hazardous reactions when stored and handled according to prescribed instructions.

Conditions to avoid Extremes of temperature and direct sunlight.

Incompatible materials Store only in the original container.

Hazardous decomposition products No decomposition products expected under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure

The acute toxicity information of the formulated product:

LD₅₀ Oral	> 2,500 mg/kg (rat)
LD₅₀ Dermal	> 4,000 mg/kg (rat)
LC₅₀ Inhalation	> 5.153 mg/L 4 h (rat)

Serious eye damage/eye irritation	Irritating (rabbit).
Skin corrosion/irritation	Irritating (rabbit).
Sensitization	Non-sensitizing

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Delayed and immediate effects and also chronic effects from short and long term exposure

Assessment STOT Specific target organ toxicity – single exposure Prothioconazole: Based on available data, the classification criteria are not met.
Tebuconazole: Based on available data, the classification criteria are not met.
N,N-Dimethyl decanamide: May cause respiratory irritation.

Assessment STOT Specific target organ toxicity – repeated exposure Prothioconazole did not cause specific target organ toxicity in experimental animal studies.
Tebuconazole did not cause specific target organ toxicity in experimental animal studies.
N,N-Dimethyl decanamide did not cause specific target organ toxicity in experimental animal studies.

Mutagenicity Prothioconazole was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.
Tebuconazole was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
N,N-Dimethyl decanamide was not genotoxic in a battery of in vitro tests.



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Assessment Carcinogenicity	<p>Prothioconazole was not carcinogenic in lifetime feeding studies in rats and mice.</p> <p>Tebuconazole caused at high dose levels an increased incidence of tumours in mice in the following organ(s): liver. The mechanism of tumour formation is not considered to be relevant to man.</p> <p>N,N-Dimethyldecanamide is not considered carcinogenic.</p>
ACGIH	None.
NTP	None.
IARC	None.
OSHA	None.
Reproductive toxicity	<p>Prothioconazole caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Prothioconazole is related to parental toxicity.</p> <p>Tebuconazole caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Tebuconazole is related to parental toxicity.</p> <p>N,N-Dimethyl decanamide is not considered a reproductive toxicant at non-maternally toxic dose levels.</p>
Developmental Toxicity	<p>Prothioconazole caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Prothioconazole are related to maternal toxicity.</p> <p>Tebuconazole caused developmental toxicity only at dose levels toxic to the dams. Tebuconazole caused an increased incidence of post implantation losses, an increased incidence of non-specific malformations.</p> <p>N,N-Dimethyl decanamide did not cause developmental toxicity in rats and rabbits.</p>
Aspiration hazard	Based on available data, the classification criteria are not met.
Further information	No further toxicological information is available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The ecotoxicity information of the formulated product unless otherwise noted:

Toxicity to fish	<p>Rainbow trout (<i>Oncorhynchus mykiss</i>) LC₅₀: 3.94 mg/l Exposure time: 96 h</p>
Toxicity to aquatic plants	<p><i>Pseudokirchneriella subcapitata</i> Growth rate IC₅₀: 9.5 mg/l Exposure time: 72 h</p> <p><i>Skeletonema costatum</i> EC₅₀: 0.88 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient prothioconazole.</p> <p>Vascular plant (<i>Lemna gibba</i>) EC₅₀: 0.0671 mg/L, for frond numbers The value mentioned relates to the active ingredient prothioconazole.</p>

Acute toxicity to aquatic Water flea (*Daphnia magna*)



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invertebrates

EC₅₀: 8.8 mg/l
Exposure time: 48 h

Persistence and Degradability

Biodegradability

Prothioconazole: Not rapidly biodegradable
Tebuconazole: Not rapidly biodegradable
N,N-Dimethyl decanamide: rapidly biodegradable

Koc

Prothioconazole: Koc: 1765
Tebuconazole: Koc: 769

Bioaccumulative potential

Bioaccumulation

Prothioconazole: Does not bioaccumulate.
Tebuconazole: Does not bioaccumulate.
N,N-Dimethyl decanamide: Does not bioaccumulate.

Mobility in soil

Prothioconazole: Slightly mobile in soils.
Tebuconazole: Slightly mobile in soils.
N,N-Dimethyl decanamide: Slightly mobile in soils.

Other adverse effects

No other effects to be mentioned.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.

Contaminated packaging

Not completely emptied packagings should be disposed of as hazardous waste.

14. TRANSPORT INFORMATION

TDG

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TEBUCONAZOLE, PROTHIOCONAZOLE SOLUTION)
Hazard Class	9
Packaging group	III
Marine pollutant	YES

IMDG

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TEBUCONAZOLE, PROTHIOCONAZOLE SOLUTION)
Hazard Class	9
Packaging group	III
Marine pollutant	YES



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IATA

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TEBUCONAZOLE, PROTHIOCONAZOLE SOLUTION)
Hazard Class	9
Packaging group	III
Environm. Hazardous Mark	YES

Special precautions for user See sections 6 to 8 of this Safety Data Sheet.

15. REGULATORY INFORMATION

US Federal Regulations

TSCA list

N,N-Dimethyl decanamide 14433-76-2

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

None.

Canadian Regulations

Canadian Domestic Substance List

None.

Any other Canadian specific regulatory information

Read the label, authorized under the *Pest Control Products Act*, prior to using or handling the pest control product.

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the *Pest Control Products Act*. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. The following is the hazard information required on the pest control product label:

DANGER – EYE IRRITANT

CAUTION - SKIN IRRITANT

There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.



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Safe Drinking Water Act Maximum Contaminant Levels

Tebuconazole 107534-96-3

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

N,N-Dimethyl decanamide 14433-76-2

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Abbreviations and acronyms

ACGIH	US. ACGIH Threshold Limit Values
CAS-No.	Chemical Abstracts Service number
ECx	Effective Concentration to x %
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IATA	International Air Transport Association
ICx	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
IARC	International Agency for Research on Cancer
LCx	Lethal Concentration To x %
LDx	Lethal Dose to x %
N.O.S.	Not Otherwise Specified
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
OSHA	US. Occupational Safety and Health Administration
TDG	Transportation of Dangerous Goods
TWA	Time Weighted Average
UN	United Nations

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Revision Note: Version #4 (Date: 1-Dec-2021) is superseded.

Reason for Revision: Reviewed and updated for general editorial purposes.

Disclaimer

The information provided in this Material 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