Safety Data Sheet



Preparation Date 07-Feb-2019 Revision date 05-Oct-2021 Revision Number: 3

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

Identification of the product

Product Description Manzate Max

Other means of identification

Internal SDS code 12-394XCA Registration number(s) PCPA 33299

Recommended use of the chemical and restrictions on use

Recommended use Fungicides.

Uses advised against Activities contrary to label recommendation

Details of the Supplier of the Safety Data Sheet

Supplier Address

UPL NA Inc.

630 Freedom Business Center

Suite 402

King of Prussia, PA 19406

Emergency telephone number

Company Phone Number 1-800-438-6071

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 3
Skin sensitization	Category 1
Reproductive Toxicity	Category 1B

Label elements

EMERGENCY OVERVIEW

DANGER

Hazard Statements

Toxic if inhaled

May cause an allergic skin reaction
May damage fertility or the unborn child



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Appearance Yellow Green Physical state Liquid Odor pungent

Precautionary Statements - Prevention

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

Wear cold insulating gloves/face shield/eye protection

Do not get in eyes, on skin, or on clothing

Use only outdoors or in a well-ventilated area

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC) OTHER INFORMATION

- Very toxic to aquatic life
- · May be harmful in contact with skin

3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%
1,2-Benziosothiazolin-3-one (Proxel	2634-33-5	0.16
GXL)		
Zinc manganese ethylenebis	8018-01-7	37
dithiocarbamate		
Ethylene thiourea	96-45-7	0-0.5

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

Eye contact 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.

Skin contact Remove and wash contaminated clothing before re-use. Wash off immediately with soap

and plenty of water for at least 15 minutes. Call a poison control center or doctor for

treatment advice.

Inhalation 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 physician or poison

control center immediately.

Ingestion Call a physician or poison control center immediately. Do not induce vomiting without

medical advice. Never give anything by mouth to an unconscious person.

Protection of First-aidersUse personal protective equipment.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and

Effects

no data available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

Carbon dioxide (CO2).

Use:. Dry chemical. Water spray. alcohol-resistant foam.

Unsuitable extinguishing media no data available.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours.

Hazardous combustion products Carbon disulfide, ethylene thiourea (ETU).

Explosion data

Protective equipment and precautions for firefighters

Use personal protective 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

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with skin and eyes. Wear protective gloves/protective clothing and eye/face

protection. Wash thoroughly after handling.

Environmental Precautions

requirements, for assistance in waste characterization and/or hazardous waste disposal

and other requirements listed in pertinent environmental permits.

Methods and material for containment and cleaning up

Methods for Clean-Up Soak up with inert absorbent material. 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 Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Wear

personal protective equipment. Do not breathe vapours or spray mist. Wash thoroughly

after handling. Remove and wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a cool, well-ventilated place.

incompatible materials Strong oxidizing agents.

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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.

Chemical name	ACGIH TLV	OSHA PEL
Zinc manganese ethylenebis		(vacated) Ceiling: 5 mg/m ³
dithiocarbamate		

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:. Goggles. Face-shield.

Skin protection Respiratory protection

Long sleeved clothing. Chemical resistant gloves. Chemical resistant footwear plus socks. 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 Yellow Green **Physical state** Liquid Odor pungent

No information available color

VALUES Remarks/ Method Property None known рΗ Melting point/freezing point 9°C None known **Boiling Point/Range** None known Flash Point No information available None known

Flammability (solid, gas)

None known Specific gravity 1.27-1.33

None known **Bulk density** 1270 kg/m³ None known Solubility in Other Solvents Dispersible in water None known Partition coefficient: n-octanol/water None known **Autoignition temperature** None known None known

Decomposition temperature Viscosity None known

9.2 OTHER INFORMATION

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under normal conditions. Hazardous polymerisation does not occur.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization Hazardous polymerisation does not occur.

Conditions to avoid

No information available.

incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides.

11. Toxicological Information

Information on Likely Routes of Exposure

Product information

Manzate Max= oral LD50 = >5,000 mg/kgdermal LD50 = >5,000 mg/kginhalation LC50 =

>2.02 mg/L No deathsirritation = Slight irritation = Slightsensitizer = Not a sensitizer

Inhalation Harmful by inhalation.

Eye contact May cause slight irritation.

Skin contact May be harmful if absorbed through the skin.

Ingestion 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

Sensitization No information available.

Mutagenic effects no data available.

Carcinogenicity The information below indicates whether any agency has listed any ingredient as a

carcinogen.

 Chemical name
 ACGIH
 IARC
 NTP
 OSHA

 Ethylene thiourea
 Group 3
 Reasonably Anticipated
 X

 96-45-7

Reproductive effects
STOT - Single Exposure
STOT - Repeated Exposure
Not Available.
no data available.
no data available.

Chronic toxicity Avoid repeated exposure. **Aspiration hazard** No information available.

Numerical Measures of Toxicity - Product information

 LD50 Oral
 > 5000 mg/kg (rat)

 LD50 Dermal
 > 5000 mg/kg (rat)

 LC50 Inhalation
 > 2.02 mg/l

12. Ecological Information

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ecotoxicity

Manzate: 96 hr LC50

Rainbow trout -= 0.73 mg/L Fathead minnow = 0.57 mg/L Bluegill sunfish = 0.84 mg/L

72 hr EC50

Freshwater algae = 0.43 mg/L

Persistence/Degradability

no data available.

Bioaccumulation/ Accumulation

Bioaccumulative potential.

Chemical name	Log Pow
1,2-Benziosothiazolin-3-one (Proxel GXL)	1.3
2634-33-5	

Other Adverse Effects

no data available

13. Disposal Considerations

Waste Treatment Methods

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is **Waste Disposal Method**

> 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.

Refer to product label. Contaminated packaging

14. Transport Information

DOT Not regulated when shipped domestically by highway in non-bulk containers as per 49 CFR

171.4

When shipped in bulk, by vessel, or internationally use the IMDG shipping description:

When shipped in Canada domestic highway non-bulk this product can be shipped as Not **TDG**

regulated as per TDG 1.45.1 In bulk - use IMDG description

IATA

UN/ID no UN3082

Proper shipping name Environmentally hazardous substances, liquid, n.o.s (Mancozeb)

Hazard class Packing group PG III

Description Marine pollutant

IMDG

UN/ID no UN3082

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Environmentally hazardous substances, liquid, n.o.s (Mancozeb) Proper shipping name

Hazard class

Packing group PG III

Environmental hazards IMDG - Marine Pollutant

15. Regulatory Information

This chemical/product is a pesticide product registered by the PMRA and is subject to specific label requirements under these regulations. The requirements may differ classification and hazard information required for safety data sheets and for labels of non-pesticide products. The following is information as required on the registered product label.

signal word WARNING

Keep out of Reach of Children. Potential skin sensitizer. Toxic to fish.

International Inventories

USINV Present **DSL/NDSL** Not present **EINECS/** Not Present

ELINCS

Not Present **ENCS** China Present Present **KECL** Present **PICCS AICS** Present Not Present **TSCA**

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 contains a chemical or 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

Chemical name	RQ	CERCLA EHS RQs	RQ
Ethylene thiourea	10 lb		RQ 10 lb final RQ
96-45-7			RQ 4.54 kg final RQ

CERCLA

	Component	RQ
	Ethylene thiourea	10 lb
	96-45-7 (0-0.5)	
SARA Product RQ	0	

SARA Product RQ

RCRA

Component	RCRA - D Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Ethylene thiourea			U116
96-45-7 (0-0.5)			

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
1,2-Benziosothiazolin-3-one (Proxel GXL) 2634-33-5 (0.16)			Х	
Zinc manganese ethylenebis dithiocarbamate 8018-01-7 (37)			X	
Ethylene thiourea 96-45-7 (0-0.5)			X	

State Regulations

California Proposition 65 This product contains the following Proposition 65 chemicals:

California i reposition de This product contains the following i reposition de chemicals:				
Component		California Prop. 65		
Zinc manganese ethylenebis dithiocarba	amate	Carcinogen		
8018-01-7 (37)				
Ethylene thiourea	Carcinogen			
96-45-7 (0-0.5)		Developmental		
Chemical name	CAS No	CATEGORY		
Zinc manganese ethylenebis dithiocarbamate	8018-01-7	Carcinogen		
Ethylene thiourea	96-45-7	-7 Carcinogen		

Prop 65 Pictogram



Prop 65 Warning Statement California Proposition 65

WARNING

This product can expose you to chemicals which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Ethylene thiourea - 96-45-7	X	X	X	X	

International regulations

U.S. EPA Label information

EPA Pesticide registration number PCPA 33299

16. Other Information

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

Preparation Date Revision date Revision Summary Update section 14

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End of SDS