SAFETY DATA SHEET

Zinatra

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008



SDS #: NP-0248-A

Revision Date: 2017-04-03

Format: EU Version 1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Code NP-0248-A

Product name Zinatra

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

Recommended Use: A fertilizer with micronutrients for use in agriculture and horticulture

Restrictions on useUse as recommended by the label

1.3. Details of the supplier of the safety data sheet

<u>Manufacturer</u>

Headland Agrochemincals

Rectors Lane Pentre Flintshire CH5 2DH United Kingdom

Supplier

Headland Agrochemincals

Rectors Lane Pentre Flintshire CH5 2DH United Kingdom

For further information, please contact:

Contact Point

Tel: +44(0)1244 537370 Fax: +44(0)1244 532097

E-mail address flintshire.enquiry@fmc.com

1.4. Emergency telephone number

Emergency telephone Tel: +44(0)1244 537370 (Office hours only)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture Regulation (EC) No 1272/2008

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Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)
EUH208: Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.	

2.2. Label elements

Hazard pictograms



Signal Word WARNING

Hazard Statements

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

EUH208 - Contains (1,2-Benzisothiazolin-3-one). May produce an allergic reaction

Precautionary Statements

P273 - Avoid release to the environment

P391 - Collect spillage

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

2.3. Other hazards

No information available.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No	CAS-No	Weight percent	GHS Classification	REACH registration number
Zinc oxide	215-222-5	1314-13-2	40-60	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119463881-32- XXXX
ethane-1,2-diol	203-473-3	107-21-1	1-5	Acute Tox. 4 (H302)	01-2119456816-28- XXXX
1,2 benzisothiazolin-3-one	.,_		<0.1	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Aquatic Acute 1 (H400)	No data available

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye contact Flush eyes with water for at least 15 minutes. Get medical attention if eye irritation

develops or persists.

Skin Contact Wash off immediately with soap and plenty of water.

Inhalation Remove person from exposure ensuring one's own safety while doing so.

Ingestion Clean mouth with water.

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4.2. Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed

Skin contact: May see mild irritation at the site of contact.

Eye contact: Possible irritation and redness. Ingestion: Possible irritation of the throat.

Inhalation: May experience irritation of the throat with a feeling of tightness in the chest. Delayed/Immediate effects: Immediate effects can be expected after short-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Indication of immediate medical attention and special treatment needed. if necessary

Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Using spraywater to cool the containers.

Unsuitable extinguishing media

No information available

5.2. Special hazards arising from the substance or mixture

Toxic fumes may be released in fire situations.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment. Contaminated fire extinguishing water should not be discharged into drains, if preventable.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Do not discharge into drains or rivers. Contain the spillage using bunding. Accidental release into water courses must be alerted to the appropriate regulatory body.

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 Surface water drains within close vicinity of the spill should be covered. Absorb into dry

earth or sand. Transfer to a closable, labelled salvage container for disposal by anappropriate method. Refer to section 13 of SDS for suitable method of disposal.

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

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7.1. Precautions for safe handling

Handling

Ensure adequate ventilation.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage

Protect from frost, heat and sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. Store rooms or warehouses should be made of non-combustible materials with impermeable floors. Store above 5°C.

7.3. Specific end use(s)

Risk Management Methods (RMM)

Not Applicable.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Chemical Name	European Union	The United Kingdom	France	Spain	Germany
Zinc oxide	-	-	TWA 5 mg/m ³	TWA 2 mg/m ³	-
1314-13-2			TWA 10 mg/m ³	STEL 10 mg/m ³	
ethane-1,2-diol	TWA 20 ppm	STEL 40 ppm	TWA 20 ppm	TWA 20 ppm	-
107-21-1	TWA 52 mg/m ³	STEL 104 mg/m ³	TWA 52 mg/m ³	TWA 52 mg/m ³	
	STEL 40 ppm	STEL 30 mg/m ³	STEL 40 ppm	STEL 40 ppm	
	STEL 104 mg/m ³	TWA 10 mg/m ³	STEL 104 mg/m ³	STEL 104 mg/m ³	
	S*	TWA 20 ppm	P*	S*	
		TWA 52 mg/m ³			
		Skin			
Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
Zinc oxide	-	TWA 2 mg/m ³	-	TWA 2 mg/m ³	TWA 4 mg/m ³
1314-13-2		STEL 10 mg/m ³		STEL 10 mg/m ³	
ethane-1,2-diol	TWA 20 ppm	TWA 20 ppm	Huid*	TWA 20 ppm	TWA 10 ppm
107-21-1	TWA 52 mg/m ³	TWA 52 mg/m ³	STEL 104 mg/m ³	TWA 50 mg/m ³	TWA 26 mg/m ³
	STEL 40 ppm	STEL 40 ppm	TWA 52 mg/m ³	STEL 40 ppm	TWA 10 mg/m ³
	STEL 104 mg/m ³	STEL 104 mg/m ³	TWA 10 mg/m ³	STEL 100 mg/m ³	H*
	Pelle*	Ceiling 100 mg/m ³		iho*	
		C(A4)			
		P*			
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Zinc oxide	TWA 5 mg/m ³	TWA 3 mg/m ³	TWA 5 mg/m ³	TWA 5 mg/m ³	TWA 2 mg/m ³
1314-13-2		STEL 3 mg/m ³	STEL 10 mg/m ³	STEL 10 mg/m ³	STEL 10 mg/m ³
ethane-1,2-diol	1			TWA 20 mg/m ³	TWA 10 mg/m ³
107-21-1	STEL 20 ppm	H*	STEL 50 mg/m ³	TWA 52 ppm	TWA 20 ppm
	STEL 52 mg/m ³	TWA 10 ppm		TWA 52 mg/m ³	TWA 52 mg/m ³
	TWA 10 ppm	TWA 26 mg/m ³		S*	STEL 40 ppm
	TWA 26 mg/m ³	STEL 20 ppm		STEL 104 mg/m ³	STEL 104 mg/m ³
		STEL 52 mg/m ³		STEL 40 ppm	Skin

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

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8.2. Exposure controls

Engineering measures

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

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Personal protective equipment

Eye/face protection Safety Glasses. Eye wash bottle with pure water.

Hand protection Protective gloves. Nitrile rubber. Rubber gloves.

Skin and body protectionWear impervious gloves and/or clothing if needed to prevent contact with the material.

Respiratory Protection No special protective equipment required.

Environmental exposure controls Refer to specific Member State legislation for requirements under Community

environmental legislation.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Suspension

Appearance Liquid suspension, Opaque

Odour Barely perceptible

Colour White

Odour threshold No information available

pH 8.5 - 10.5

Melting point/freezing point
Boiling point/boiling range
Flash point
Evaporation Rate
Flammability (solid, gas)

No information available
No information available
No information available
No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapour pressure
Vapour density

No information available
No information available
No information available

Specific gravity 1.77 - 1.82

Water solubility Dispersible in water 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 No information available **Explosive properties Oxidising properties** No information available

9.2. Other information

Softening point
Molecular weight
VOC content (%)
Density
Bulk Density
No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable under recommended storage conditions

10.2. Chemical stability

Stable under normal conditions.

Explosion data

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Sensitivity to Mechanical Impact No information available. **Sensitivity to Static Discharge** No information available.

10.3. Possibility of hazardous reactions

Hazardous polymerisation

Hazardous polymerisation does not occur.

Hazardous reactions

None under normal processing. Decomposition can occur on exposure to heat or moisture.

10.4. Conditions to avoid

Heat. Extremes of temperature and direct sunlight. Do not freeze.

10.5. Incompatible materials

Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

May emit toxic fumes under fire conditions.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

Chemical Name	LD50 Oral	LD50 Dermal	Inhalation LC50
Zinc oxide	> 5000 mg/kg (Rat)		
ethane-1,2-diol	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat) = 9530	
		μL/kg(Rabbit)	
1,2 benzisothiazolin-3-one	= 1020 mg/kg (Rat)		

Skin corrosion/irritation
Serious eye damage/eye irritation
Sensitisation
Mutagenicity
Mutagenicity
Mutagenicity
Mo information available.
No information available.
No information available.

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Aspiration hazard
No information available.
No information available.
No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

There is no data available for this product.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
ethane-1,2-diol	96 h EC50: 6500 - 13000 mg/L	96 h LC50: 14 - 18 mL/L	48 h EC50: = 46300 mg/L (Daphnia

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(Pseudokirchneriella subcapitata)	(Oncorhynchus mykiss) static 96 h	magna)
	LC50: 40000 - 60000 mg/L	
	(Pimephales promelas) static 96 h	
	LC50: = 16000 mg/L (Poecilia	
	reticulata) static 96 h LC50: = 27540	
	mg/L (Lepomis macrochirus) static	
	96 h LC50: = 40761 mg/L	
	(Oncorhynchus mykiss) static 96 h	
	LC50: = 41000 mg/L (Oncorhynchus	
	mykiss)	

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

No information available.

Chemical Name	Partition coefficient
ethane-1,2-diol	-1.93
1,2 benzisothiazolin-3-one	1.3

12.4. Mobility in soil

Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

12.6. Other adverse effects

Toxic to aquatic organisms

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused

products

Transfer to a suitable container and arrange for collection by specialised disposal company. Alternatively, the product can be incinerated, in accordance with local regulations. The

diluted product and washings should be sent to a water treatment facility. Do not contaminate ponds, waterways or ditches with chemical or used containers. Do not

discharge to sewer systems.

Contaminated Packaging Dispose of in accordance with local regulations.

EWC Waste Disposal No. 02 01 08

Section 14: TRANSPORT INFORMATION

IMDG/IMO

14.1 UN/ID no UN3082

14.2 Proper shipping name Environmentally hazardous substance, liquid, n.o.s. (zinc oxide)

14.3 Hazard class 9
14.4 Packing group III

Description UN3082, Environmentally hazardous substance, liquid, n.o.s., (zinc oxide), 9, III, Marine

pollutant

14.5 Marine pollutant Applicable

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Environmental hazard Yes

14.6 Special Provisions No special precautions.

Tunnel code = E Transport category = 3

EmS F-A, S-F

14.7 Transport in bulk according to The product is not transported in bulk tankers.

Annex II of MARPOL 73/78 and the

IBC Code

RID

14.1UN/ID noNot regulated14.2Proper shipping nameNot regulated14.3Hazard classNot regulated14.4Packing groupNot regulated14.5Environmental hazardYes

14.5 Environmental hazard Yes **14.6 Special Provisions** None

ADR/RID

14.1 UN/ID noNot regulated14.2 Proper shipping nameNot regulated14.3 Hazard classNot regulated14.4 Packing groupNot regulated

14.5 Environmental hazard Yes14.6 Special Provisions None

ICAO/IATA

14.1 UN/ID no UN3082

14.2 Proper shipping name Environmentally hazardous substance, liquid, n.o.s. (zinc oxide)

14.3 Hazard class 9
14.4 Packing group III

Description UN3082, Environmentally hazardous substance, liquid, n.o.s., (zinc oxide), 9, III, Marine

pollutant Yes

14.5 Environmental hazard

14.6 Special Provisions No special precautions.

Tunnel code = E
Transport category = 3

Section 15: REGULATORY INFORMATION

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not Applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not Applicable

International Inventories

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Chemical Name	TSCA (United States)	DSL (Canada)	EINECS/ELINC S (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Zinc oxide 1314-13-2	Х	X	X	Х	Х	Х	Х	Х
ethane-1,2-diol 107-21-1	Х	Х	X	Х	Х	Х	Х	Х
1,2 benzisothiazolin-3-one 2634-33-5	Х	Х	Х	Х	Х	Х	Х	Х

15.2. Chemical safety assessment

A Chemical Safety Assessment has not yet been completed for this substance

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of R-phrases referred to under sections 2 and 3

No information available

Full text of H-Statements referred to under sections 2 and 3

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

EUH208 - May produce an allergic reaction

Legend

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS: CAS (Chemical Abstracts Service)

Ceiling: Maximum limit value:

DNEL: Derived No Effect Level (DNEL)

EINECS: EINECS (European Inventory of Existing Chemical Substances)

GHS: Globally Harmonised System (GHS)

IATA: International Air Transport Association (IATA)
ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods (IMDG)

LC50 (lethal concentration)

LD50: LD50 (lethal dose)

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

STEL: Short term exposure limit

SVHC: Substances of Very High SVHC: Substances of Very High Concern for Authorisation:

Concern for Authorisation:

time weighted average

vPvB: very Persistent and very Bioaccumulative

Revision Date: 2017-04-03

Reason for revision: Initial Release.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

TWA:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Prepared By

Headland Agrochemicals

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