

SECTION 1: Identification

1.1. GHS Product identifier

Product form : Mixture
Product name : FIXA ZINC
UN-No. (ADR) : 3082

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Fertilizer

1.4. Supplier's details

Supplier

AGRONUTRITION SAS
Parc Activestre 3 avenue de l'Orchidée
31390 CARBONNE
France
T +33 (0)5 61 97 85 00 - F +33 (0)5 61 97 85 01
fds-msds@agro-nutrition.fr - www.agronutrition.com

Distributor

DE SANGOSSE NEW ZEALAND Ltd
PO Box729,
Tauranga, 3144
NEW ZEALAND
T + 07 571 0908 - F + 0800 432 352
infonz@desangosse.com

1.5. Emergency phone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
New Zealand	New Zealand National Poisons Centre		+0800 764 766	

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Acute toxicity (oral), Category 5	H303	Calculation method
Serious eye damage/eye irritation, Category 1	H318	Calculation method
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400	Calculation method
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410	Calculation method

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects : May be harmful if swallowed, Causes serious eye damage, Very toxic to aquatic life with long lasting effects.

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN) :



Signal word (GHS UN) : Danger
Hazardous ingredients : zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate)
Hazard statements (GHS UN) : H303 - May be harmful if swallowed
H318 - Causes serious eye damage
H410 - Very toxic to aquatic life with long lasting effects
Precautionary statements (GHS UN) : P102 - Keep out of reach of children.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.

FIXA ZINC

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

P305+P354+P338 - IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P316 - Get emergency medical help immediately.
P391 - Collect spillage.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : Repeated or prolonged skin contact can result in sensitisation in susceptible individuals

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate)	CAS-No.: 7446-19-7	25 – 50	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS-No.: 55965-84-9	< 0,01	Acute Tox. 2 (Inhalation), H330 Acute Tox. 2 (Dermal), H310 Acute Tox. 3 (Oral), H301 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation : Move the affected person to the fresh air. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact : Wash off with plenty of water. If case of redness or irritation, call a doctor.
First-aid measures after eye contact : In case of eye contact, immediately rinse with clean water for 20-30 minutes. Consult an eye specialist.
First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Cough. Respiratory tract irritation.
Symptoms/effects after skin contact : Irritation. Rednesses.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Abdominal pain, nausea.

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

Treat symptomatically.

FIXA ZINC

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

- Suitable extinguishing media : In case of fire: Water spray. Water mist. Foam. Powders. Carbon dioxide (CO₂).
Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2. Specific hazards arising from the chemical

- Fire hazard : Not flammable.
Explosion hazard : Not explosive.
Hazardous decomposition products in case of fire : Sulphur dioxide. Metallic oxides. Zinc.

5.3. Special protective actions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Avoid contact with skin and eyes. In case of important spillage : Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Contain the spilled material by bunding. Do not allow to enter drains or water courses.

6.3. Methods and materials for containment and cleaning up

- For containment : Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite.
Methods for cleaning up : Clean preferably with a detergent - Avoid the use of solvents.
Other information : Dispose of contaminated materials in accordance with current regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Do not expose particularly sensitive persons at risk. Wear personal protective equipment. Observe the label precautions.
Hygiene measures : Always wash hands after handling the product. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container tightly closed. Store in a dry, cool and well-ventilated place. Keep out of the reach of children. Protect from heat and direct sunlight. Keep out of frost. Keep away from food, drink and animal feedingstuffs.
Packaging materials : Store always product in container of same material as original container.
Storage temperature : 0 – 35 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

FIXA ZINC

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure that there is a suitable ventilation system.
Environmental exposure controls	: Do not allow into drains or water courses.
Other information	: Do not eat, drink or smoke when using this product.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment:

Protective clothing.

Hand protection	: Protective gloves. ISO 374-1. Recommended materials : Latex. Nitrile rubber. PVC gloves. Butyl rubber
Eye protection	: Wear security glasses which protect from splashes. (EN 166). Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure
Skin and body protection	: Wear suitable protective clothing. Combination of fertilisers and fertilising products. Boots
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s)



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Appearance	: Soluble concentrate (SL)
Colour	: dark brown.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: > 90 °C (ISO 3405)
Flammability	: Not flammable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 93 °C (Standard ISO 3679)
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 5.5 +/- 0,6
pH solution	: 6.6 (+/- 0,6) (1% in water)
Viscosity, kinematic (calculated value) (40 °C)	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 1.3 +/- 1,5%
Relative vapour density at 20°C	: Not available
Solubility	: Soluble in water.
Particle size	: Not applicable

9.2. Data relevant with regard to physical hazard classes (supplemental)

Other properties	: Efflux time : 15-30 s.
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FIXA ZINC

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable in use and storage conditions as recommended in item 7.

10.3. Possibility of hazardous reactions

To our knowledge, the product does not present any particular risk, under normal conditions of use.

10.4. Conditions to avoid

Heat. Freezing.

10.5. Incompatible materials

Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: May be harmful if swallowed.
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

FIXA ZINC	
ATE UN (oral)	2175.891 mg/kg bodyweight
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)	
ATE UN (oral)	100 mg/kg bodyweight
ATE UN (dermal)	50 mg/kg bodyweight
ATE UN (gases)	100 ppmv/4h
ATE UN (vapours)	0.5 mg/l/4h
ATE UN (dust,mist)	0.05 mg/l/4h
zinc sulphate (hydrous) (mono-, hexa-and hepta hydrate) (7446-19-7)	
LD50 oral rat	574 (574 – 2949) mg/kg
LD50 oral	≈ 926 mg/kg (mouse male) (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method)
ATE UN (oral)	574 mg/kg bodyweight

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 5.5 +/- 0,6
Serious eye damage/irritation	: Causes serious eye damage. pH: 5.5 +/- 0,6
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)

FIXA ZINC

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.
Classification procedure (Hazardous to the aquatic environment, short-term (acute)) : Calculation method
Hazardous to the aquatic environment, long-term (chronic) : Very toxic to aquatic life with long lasting effects.
Classification procedure (Hazardous to the aquatic environment, long-term (chronic)) : Calculation method

zinc sulphate (hydrous) (mono-, hexa-and hepta hydrate) (7446-19-7)

LC50 - Fish [1]	0.78 mg/l (96 Hours) (Pimephales promelas)
EC50 - Crustacea [1]	0.259 mg/l (48 Hours) (Daphnia magna) (OECD 202 method)
NOEC chronic fish	0.057 mg/l (116 days) (Salmo trutta) (OECD 210 method)

12.2. Persistence and degradability

FIXA ZINC

Persistence and degradability : Not rapidly degradable

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)

Persistence and degradability : Not rapidly degradable

zinc sulphate (hydrous) (mono-, hexa-and hepta hydrate) (7446-19-7)

Persistence and degradability : Not rapidly degradable

12.3. Bioaccumulative potential

FIXA ZINC

Bioaccumulative potential : No additional information available

12.4. Mobility in soil

FIXA ZINC

Mobility in soil : No additional information available

12.5. Other adverse effects

Ozone : Not classified (Based on available data, the classification criteria are not met)
Other adverse effects : No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Recycle or dispose of in compliance with current legislation. Dispose of at a licensed waste collection centre. Do not discharge into drains or the environment.
Product/Packaging disposal recommendations : Empty the packaging completely prior to disposal. Do not remove label until container is thoroughly cleaned. Dispose of at an licensed site.




SECTION 14: Transport information

In accordance with RTMD ONU / IMDG / IATA

FIXA ZINC

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

UN RTDG	IMDG	IATA
14.1. UN number		
3082	3082	3082
14.2. UN Proper Shipping Name		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc sulphate (hydrous) (mono-, hexa-and hepta hydrate))	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc sulphate (hydrous) (mono-, hexa-and hepta hydrate))	Environmentally hazardous substance, liquid, n.o.s. (zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate))
Transport document description		
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc sulphate (hydrous) (mono-, hexa-and hepta hydrate)), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc sulphate (hydrous) (mono-, hexa-and hepta hydrate)), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (zinc sulphate (hydrous) (mono-, hexa-and hepta hydrate)), 9, III
14.3. Transport hazard class(es)		
9	9	9
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes
No supplementary information available		

14.6. Special precautions for user

UN RTDG

Special provisions (UN RTDG)	: 274, 331, 335, 375
Limited quantities (UN RTDG)	: 5L
Excepted quantities (UN RTDG)	: E1
Packing instruction (UN RTDG)	: P001, IBC03, LP01
Special packing provisions (UN RTDG)	: PP1
Portable tank and bulk container special instructions (UN RTDG)	: T4
Portable tank and bulk container special provisions (UN RTDG)	: TP1, TP29

IMDG

Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG)	: A

IATA

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG

FIXA ZINC

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158, A197, A215
ERG code (IATA)	: 9L

14.7. Transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

Revision date	: 10/30/2023
Supersedes	: 8/1/2022

Indication of changes:

This sheet has been revised completely (changes were not marked).

Abbreviations and acronyms	: ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways EC50 - Median effective concentration LC50 - Median lethal concentration ED - Endocrine disrupting properties EN - European Standard SDS - Safety Data Sheet IATA - International Air Transport Association IMDG - International Maritime Dangerous Goods LD50 - Median lethal dose CAS-No. - Chemical Abstract Service number PBT - Persistent Bioaccumulative Toxic RID - Regulations concerning the International Carriage of Dangerous Goods by Rail OEL - Occupational Exposure Limit vPvB - Very Persistent and Very Bioaccumulative
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Full text of H-statements:

Acute Tox. 2 (Dermal)	Acute toxicity (dermal), Category 2
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
Skin Sens. 1A	Skin sensitisation, category 1A
H301	Toxic if swallowed
H302	Harmful if swallowed
H303	May be harmful if swallowed
H310	Fatal in contact with skin

FIXA ZINC

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Full text of H-statements:	
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H330	Fatal if inhaled
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), UN

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.