

SAFETY DATA SHEET

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

1.1. Product identifier

Product name : SEALEAF ORIGIN

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

Use for agriculture (nutrients/ trace elements for plants)

1.3. Details of the supplier of the safety data sheet

Registered company name : AGRONUTRITION SAS..

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Association/Organisation : New Zealand National Poisons Centre : poisons@otago.ac.nz.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS compliant.

Skin sensitisation, Category 1A (Skin Sens. 1A, H317).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

GHS compliant.

Hazard pictograms :



GHS07

Signal Word :

WARNING

Product identifiers :

CAS 55965-84-9

REACTION MASS OF 5-CHLORO-2-METHYL-2H-ISOTHIAZOL-3-ONE AND
 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1)

Hazard statements :

H317

May cause an allergic skin reaction.

Precautionary statements - General :

P102

Keep out of reach of children.

Precautionary statements - Prevention :

P280

Wear protective gloves/protective clothing/eye protection/face
 protection/hearing protection.

SEALEAF ORIGIN

Precautionary statements - Response :

P302 + P352 IF ON SKIN: Wash with plenty of water/...
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Precautionary statements - Disposal :

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3. Other hazards**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures****Composition :**

| Identification | GHS | Note | % |
|---|---|------|-----------------|
| CAS: 64-02-8 EC: 200-573-9 REACH: 01-2119486762-27-XXXX TETRASODIUM ETHYLENE DIAMINE TETRAACETATE | GHS07, GHS05 Dgr Acute Tox. 4, H302 Eye Dam. 1, H318 Acute Tox. 4, H332 | | 2.5 <= x % < 10 |
| INDEX: 613-167-00-5 CAS: 55965-84-9 REACTION MASS OF 5-CHLORO-2-METHYL-2H-ISOTHIAZOL-3- ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1) | GHS06, GHS05, GHS09, GHS07 Dgr Acute Tox. 3, H301 Acute Tox. 2, H310 Skin Corr. 1C, H314 Skin Sens. 1A, H317 Eye Dam. 1, H318 Acute Tox. 2, H330 Aquatic Acute 1, H400 M Acute = 100 Aquatic Chronic 1, H410 M Chronic = 100 | | 0 <= x % < 0.1 |

Information on ingredients :

(Full text of H-phrases: see section 16)

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures**In the event of exposure by inhalation :**

Remove the victim to fresh air. In case of respiratory problems, consult a doctor/medical service.

In the event of splashes or contact with eyes :

Flush immediately with plenty of water for 15 minutes keeping the eyelids open. If there is any pain, redness or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Seek medical attention immediately, showing the label.

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

No data available.

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

Symptomatic treatment.

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SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- foam
- powder
- carbon dioxide (CO₂)

The choice of the method depends on the other products present.

Do not use a strong water jet, danger of spreading of the product.

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

See section 1 for information about emergency contact.

See section 13 for obtain additional information on waste treatment.

See section 8 for information on personal protection equipments.

See section 7 for information on safe handling.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Fire prevention :

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

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Storage

Keep out of reach of children.
Keep away from food, drink and animal feedingstuffs.

Packaging

Always keep in packaging made of an identical material to the original.
Replace the label in case of split of packaging.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

No data available.

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

| <u>Final use:</u> | <u>Workers.</u> |
|---------------------------|---------------------------|
| Exposure method: | Inhalation. |
| Potential health effects: | Short term local effects. |
| DNEL : | 2.5 mg of substance/m3 |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term local effects. |
| DNEL : | 2.5 mg of substance/m3 |

| <u>Final use:</u> | <u>Consumers.</u> |
|---------------------------|---------------------------|
| Exposure method: | Inhalation. |
| Potential health effects: | Short term local effects. |
| DNEL : | 1.5 mg of substance/m3 |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term local effects. |
| DNEL : | 1.5 mg of substance/m3 |

Predicted no effect concentration (PNEC):

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

| | |
|----------------------------|------------------------------|
| Environmental compartment: | Fresh water. |
| PNEC : | 2.2 mg/l |
| Environmental compartment: | Sea water. |
| PNEC : | 0.22 mg/l |
| Environmental compartment: | Intermittent waste water. |
| PNEC : | 1.2 mg/l |
| Environmental compartment: | Fresh water sediment. |
| PNEC : | 0.72 mg/kg |
| Environmental compartment: | Waste water treatment plant. |
| PNEC : | 43 mg/l |

8.2. Exposure controls**Personal protection measures, such as personal protective equipment**

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.
Store personal protective equipment in a clean place, away from the work area.

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Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties****General information :**

| | |
|------------------|--------------------------|
| Physical state : | Fluid liquid. |
| Color | Opaque Dark Brown |
| State | Soluble concentrate (SL) |

Important health, safety and environmental information

| | |
|---|----------------------------------|
| pH : | 8.30 +/-0.9. Slightly basic. |
| Boiling point/boiling range : | Not relevant. |
| Flash point interval : | Not relevant. |
| Vapour pressure (50°C) : | Not relevant. |
| Density : | 1230 (+/-1.5%) g/dm ³ |
| Water solubility : | Soluble. |
| Melting point/melting range : | Not relevant. |
| Self-ignition temperature : | Not relevant. |
| Decomposition point/decomposition range : | Not relevant. |

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY**10.1. Reactivity**

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

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10.4. Conditions to avoid

Avoid :
- frost

10.5. Incompatible materials

Keep away from :
- strong acids
- strong oxidising agents

10.6. Hazardous decomposition products

No data available.

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May cause an allergic reaction by skin contact.

11.1.1. Substances

Acute toxicity :

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)
Oral route : LD50 = 2000 mg/kg
Species : Rat

11.1.2. Mixture

Skin corrosion/skin irritation :

Irritation: No observed effect

Species : Reconstructed human epidermis
OECD Guideline 439 (In Vitro Skin Irritation, Reconstructed Human Epidermis Test Method)

Serious damage to eyes/eye irritation :

No observed effect.

No classification for eye irritation / serious eye damage (OECD Guideline Test Guideline No. 492: Reconstituted Human Corneal Epithelium (ECHR) Model Test Method).

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)
Fish toxicity : LC50 > 100 mg/l
Species : Lepomis macrochirus
Duration of exposure : 96 h
EPA OPP 72-1 (Fish Acute Toxicity Test)

NOEC = 36.9 mg/l
Duration of exposure : 35 days
OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test)

Crustacean toxicity : EC50 > 100 mg/l
Species : Daphnia magna
Duration of exposure : 48 h

NOEC = 25 mg/l
Species : Daphnia sp.
Duration of exposure : 21 days
OECD Guideline 211 (Daphnia magna Reproduction Test)

Algae toxicity : ECr50 > 100 mg/l
Species : Scenedesmus sp.
Duration of exposure : 72 h

SEALEAF ORIGIN

12.1.2. Mixtures

No aquatic toxicity data available for the substances.

12.2. Persistence and degradability

12.2.1. Substances

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

Five-day biochemical oxygen demand : DBO5 20 g/kg

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

12.3. Bioaccumulative potential

12.3.1. Substances

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

Octanol/water partition coefficient : log K_{ow} = -13

Bioaccumulation : BCF = 1.8
Species : Lepomis macrochirus (Fish)

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

The appropriate waste management of the mixture and/or its container must be determined in accordance with local regulations.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Local arrangements :

Submit to an approved disposal.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

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14.6. Special precautions for user

-

SECTION 15 : REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

The following regulations have been used:

- Globally Harmonized System of Classification and Labelling of Chemicals (GHS), review no. 7 (2017)

- Container information:

No data available.

- Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

| | |
|------|---|
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H310 | Fatal in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H330 | Fatal if inhaled. |
| H332 | Harmful if inhaled. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Abbreviations :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.
LC50 : The concentration of a test substance resulting in 50% lethality in a given period.
EC50 : The effective concentration of substance that causes 50% of the maximum response.
ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.
NOEC : The concentration with no observed effect.
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.
DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
STEL : Short-term exposure limit
TWA : Time Weighted Averages
TMP : French Occupational Illness table
TLV : Threshold Limit Value (exposure)
AEV : Average Exposure Value.
ADR : European agreement concerning the international carriage of dangerous goods by Road.
IMDG : International Maritime Dangerous Goods.
IATA : International Air Transport Association.
ICAO : International Civil Aviation Organisation
RID : Regulations concerning the International carriage of Dangerous goods by rail.
GHS07 : Exclamation mark
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.