SAFETY DATA SHEET

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

1.1. Product identifier

Product name : NECTAR INTENSE

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..

Address : Parc Activestre - 3 avenue de l'Orchidée.31390.CARBONNE.FRANCE.

Telephone : +33 (0)5 61 97 85 00. Fax : +33 (0)5 61 97 85 01.

fds-msds@agro-nutrition.fr

http://www.agronutrition.com

Distributed by: DeSangosse New Zealand Ltd, Second Floor, Unit 5, 144 Third Avenue, Tauranga, 3110, New Zealand .Ph:07 571 0908, infonz@desangosse.com

1.4. Emergency telephone number : +0800 764 766 .

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 irritation, Category 3 (Skin Irrit. 3, H316).

Eye irritation, Category 2A (Eye Irrit. 2A, H319).

Respiratory sensitisation, Category 1 (Resp. Sens. 1, H334).

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 :

GHS08

Signal Word :

DANGER

Product identifiers :

CAS 9012-54-8 CELLULASE

Hazard statements :

H316	Causes mild skin irritation.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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.

Precautionary statements - Response :

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...

Precautionary statements - Disposal :

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

2.3. Other hazards

Replace the contents / container to an approved disposal center.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	GHS	Note	%
INDEX: 017-013-00-2 CAS: 10043-52-4 EC: 233-140-8 REACH: 01-2119494219-28-XXXX CALCIUM CHLORIDE	GHS07 Wng Eye Irrit. 2, H319		25 <= x % < 50
INDEX: 647-002-00-3 CAS: 9012-54-8 EC: 232-734-4 REACH: 01-2119949289-21-XXXX CELLULASE	GHS08 Dgr Resp. Sens. 1, H334		2.5 <= x % < 10
CAS: 8000-41-7 EC: 232-268-1 REACH: 01-2119553062-49-XXXX TERPINEOL	GHS07 Wng Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 3, H402		1 <= x % < 2.5

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.

Bring the packaging, label or Material Safety Data when you call the emergency number, a poison control center or doctor.

4.1. Description of first aid measures

In the event of exposure by inhalation :

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

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

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain 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.

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

Wash with plenty of water and soap. In case of redness or irritation, consult a doctor/medical service.

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

Symptoms/lesions after inhalation: cough,respiratory tract irritation.

Symptoms/lesions after skin contact : skin irritation, redness.

Symptoms/lesions after eye contact : corrosion, irritation of eye tissues.

Symptoms/lesions after ingestion: abdominal pain, nausea.

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

Specific and immediate treatment :

Symptomatic treatment.

Eye bathing the scene.

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.

In the event of a fire, the following may be formed :

- phosgene (CCl2O)
- chlorine (Cl2)
- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

Precautions against fire: like in case of all fires involving chemicals, wear appropriate protective equipment (chemical protective clothing, boots and gloves).

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 inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

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.

Accidental, ventilate the area and recovered by pumping the product for re-use (preferably) spill. If the operation of pumping is not suitable, cover the product dry sand or vermiculite. Mix and make its removal by scanning. Transfer to a suitable container (dumpster) properly labeled and proceed to disposal by a company authorized to waste collection.

6.4. Reference to other sections

See section 1 for information about emergency contact.

Se 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 asthma, allergies and/or chronic or periodical breathing difficulties should not, under any circumstances, use these mixtures.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Fire prevention :

Handle in well-ventilated areas.

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.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Avoid skin and eye contact with this mixture.

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.

Storage

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from food, drink and animal feedingstuffs.

Keep the product away from heat sources.

Storage temperature: 0-35°C

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):

TERPINEOL (CAS: 8000-41-7)

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Short term local effects.
DNEL :	5 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term local effects.
DNEL :	1.17 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Short term local effects.
DNEL :	5.8 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Short term local effects.

DNEL : 5.8 mg of substance/m3

Final use: **Consumers.**
Exposure method: Ingestion.
Potential health effects: Long term local effects.
DNEL : 0.42 mg/kg body weight/day

Exposure method: Ingestion.
Potential health effects: Short term local effects.
DNEL : 2.5 mg/kg body weight/day

Exposure method: Dermal contact.
Potential health effects: Long term local effects.
DNEL : 0.42 mg/kg body weight/day

Exposure method: Dermal contact.
Potential health effects: Short term local effects.
DNEL : 2.5 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term local effects.
DNEL : 1.25 mg of substance/m3

Exposure method: Inhalation.
Potential health effects: Short term local effects.
DNEL : 1.25 mg of substance/m3

CALCIUM CHLORIDE (CAS: 10043-52-4)
Final use: **Workers.**
Exposure method: Inhalation.
Potential health effects: Long term local effects.
DNEL : 5 mg of substance/m3

Exposure method: Inhalation.
Potential health effects: Short term local effects.
DNEL : 10 mg of substance/m3

Final use: **Consumers.**
Exposure method: Inhalation.
Potential health effects: Long term local effects.
DNEL : 2.5 mg of substance/m3

Exposure method: Inhalation.
Potential health effects: Short term local effects.
DNEL : 5 mg of substance/m3

Predicted no effect concentration (PNEC):

TERPINEOL (CAS: 8000-41-7)
Environmental compartment: Soil.
PNEC : 0.052 mg/kg

Environmental compartment: Fresh water.
PNEC : 62 µg/l

Environmental compartment: Sea water.
PNEC : 6.2 µg/l

Environmental compartment: Fresh water sediment.
PNEC : 0.442 mg/kg

Environmental compartment:	Marine sediment.
PNEC :	0.044 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	2.57 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.

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 with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- 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.

- Respiratory protection

Avoid inhaling vapors.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Particle filter according to standard EN143 :

- P1 (White)

If the setting oeuvre the product and its application (spray atomization) is generating aerosol or fine particles liquids, it is recommended to wear a respirator, properly fitted.

Exposure controls linked to environmental protection

Do not discharge into drains, surface waters or soil. Recover accidentally quantities of common ground products. Remove waste in accordance with local and national regulations.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

No data available.

Physical state

Physical state :	Fluid liquid.
State	Concentrated suspension (SC)

Colour

Color	beige opaque salmon

Odour

Odour threshold :	Not stated.

Melting point

Melting point/melting range :	Not relevant.

Freezing point

Freezing point / Freezing range :	Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range :	Not relevant.

Flammability

Flammability (solid, gas) :	Not stated.

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) :	Not stated.
Explosive properties, upper explosivity limit (%) :	Not stated.

Flash point

Flash point interval :	Not relevant.

Auto-ignition temperature

Self-ignition temperature :	Not relevant.

Decomposition temperature

Decomposition point/decomposition range :	Not relevant.

pH

pH (aqueous solution) :	7.00 +/-0.6 (1%)
pH :	5.50 +/-0.6. Neutral.

Kinematic viscosity

Viscosity :	Not stated.

Solubility

Water solubility :	Soluble.
Fat solubility :	Not stated.

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water :	Not stated.

Vapour pressure

Vapour pressure (50°C) :	Not relevant.

Density and/or relative density

Density :	1270 (+/-1.5%) g/dm3

Relative vapour density

Vapour density :	Not stated.

9.2. Other information

No additional information.

9.2.1. Information with regard to physical hazard classes

Mixture not classified on physical hazards

9.2.2. Other safety characteristics

No additional information.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No dangerous reaction known under normal conditions of use and storage.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Easily decomposes upon contact with acids and releases carbon dioxide.

10.4. Conditions to avoid

Avoid :

- frost
- exposure to light

10.5. Incompatible materials

Keep away from :

- strong oxidising agents
- strong bases
- strong acids

10.6. Hazardous decomposition products

The product does not decompose when used for its intended purpose.

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May cause reversible damage to the skin; namely the formation of erythema and eschar following exposure up to four hours.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

May cause hypersensitivity of the respiratory tracts with effects taking the form of asthma, rhinitis/conjunctivitis or alveolitis.

11.1.1. Substances

Acute toxicity :

TERPINEOL (CAS: 8000-41-7)

Oral route :	LD50 > 2000 mg/kg Species : Rat OECD Guideline 401 (Acute Oral Toxicity)
Dermal route :	LD50 > 2000 mg/kg Species : Rabbit OECD Guideline 402 (Acute Dermal Toxicity)
Inhalation route (Vapours) :	LC50 > 4.76 mg/l Species : Rat OECD Guideline 403 (Acute Inhalation Toxicity)

11.1.2. Mixture

Acute toxicity :

No data on the product itself is available. However according to the representative components, it is possible to provide: Oral LD50 (rat)> 2000mg/kg

Skin corrosion/skin irritation :

Irritation : Causes mild skin irritation.

Serious damage to eyes/eye irritation :

Causes severe eye irritation

The severity depends on the concentration and exposure time.

Respiratory or skin sensitisation :

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity :

No evidence of this effect was found.

Carcinogenicity :

No evidence of this effect was found

Reproductive toxicant :

No evidence of this effect was found.

11.2. Information on other hazards

SECTION 12 : ECOLOGICAL INFORMATION

The mineral elements (nutrients) contained in this product are essential for healthy plant growth, but may be harmful in large quantities to wildlife, aquatic organisms or sensitive plants. It is therefore necessary to minimize the amount of product released into the environment, except as part a rational fertilization program for the plants, preferably after a test for soil and/or plant issues.

12.1. Toxicity

12.1.1. Substances

TERPINEOL (CAS: 8000-41-7)

Fish toxicity :	LC50 = 80 mg/l Species : Danio rerio Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity :	EC50 = 73 mg/l Species : Daphnia magna Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Algae toxicity :	ECr50 = 68 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)

12.1.2. Mixtures

Not classified. Based on the available data, the classification criteria are not met.

12.2. Persistence and degradability

12.2.1. Substances

TERPINEOL (CAS: 8000-41-7)

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

12.2.2. Mixtures

This product is considered readily biodegradable (slightly hazardous) and it is very soluble in water. Ensure that all flow not not resulted in the aquatic environment, or any sewer or drain. When using, do not spill the product beyond the cultivated areas (hedges, edges, ditches, streams).

12.3. Bioaccumulative potential

12.3.1. Substances

TERPINEOL (CAS: 8000-41-7)

Octanol/water partition coefficient :	log Koe = 2.6

12.3.2. Mixtures

No bioaccumulation data is available.

12.4. Mobility in soil

No information is available on mobility in soil. It is therefore essential to avoid at all costs that it spills into sewers or waterways. Prevent it from entering the ground.

12.5. Results of PBT and vPvB assessment

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

12.6. Endocrine disrupting properties

The mixture does not contain substances identified as disrupting the endocrine system for the environment >= 0.1%.

12.7. Other adverse effects

No information is available on other adverse environmental effects.

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 :

Product must be disposed of in accordance with local and national regulations.

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

-

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

-

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. 8 (2019)

- 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 :

H227	Combustible liquid.
H315	Causes skin irritation.

H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H402	Harmful to aquatic life.

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.
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.
DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
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.
GHS08 : Health hazard
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.