



### SAFETY DATA SHEET

*In compliance with EC Regulation No. 1907/2006*

*Updated on : 17/03/2014 – Version : 2.0*

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

### 1.1. Product identification

**AGROCEAN Ca**  
Calcium nitrate solution

### 1.2. Relevant identified uses of the substance or mixture

Algae based fertilizer

### 1.3 Data relative to supplier of Safety data sheet

AGRIMER  
Prat Menan - BP 29  
29880 PLOUGUERNEAU - FRANCE  
Tel : (33) 02 98 04 54 11  
Fax : (33) 02 98 04 55 15

### 1.4. Emergency phone numbers :

Orfilla France (INRS) : + 33 (0)1 45 42 59 59  
Centre Anti-Poison (Rennes) : + 33 (0)2 99 59 22 22

## SECTION 2 – HAZARD IDENTIFICATION

### 2.1. Classification of substance or mixture

According to EC Directive 67/548/EC or 1999/45/EC :

Eye irrit cat 2,  
Skin irrit cat 2  
Specific target organ toxicity following single exposure, category 3  
H315  
H319  
H335

According to EC Regulation 1272/2008 :

Xi, R36/37/38

### 2.2. Labeling elements

#### Labeling according to EC Directive 1999/45/EC

Hazard pictogram :



Hazard statements :  
Xi, R36/37/38

#### Labeling according to CLP directive

Hazard pictogram :



Hazard statements :  
Irrit eye cat 2,  
Irrit skin cat 2

Specific target organ toxicity following single exposure, category 3 H315 H319 H335
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**Precautionary statements :**

Wear gloves and protective eyewear.

Do not eat, smoke, or drink while handling the product. Wash hands after handling product.

P102 : Keep out of reach of children

P103 : Read label before use

P501 : Dispose of contents / container in accordance with local/regional/ national/ international regulations

**2.3. Other hazards :**

No further relevant information

**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures**Components with hazard statements :

Component	Classification according to EC Regulation 1272/2008	Classification according to EC Directive 67/548/EEC or EC Directive 1999/45/EC	Composition	Classification of mixture
Tetra hydrated calcium nitrate CAS : 13477-34-4 CE : 233-332-1	Eye irrit cat 2, Skin irrit cat 2 Specific target organ toxicity following single exposure, category 3 H315 H319 H335	Xi, R36/37/38	60%	Classified according to conventional method
Ammonium nitrate CAS : 6484-52-2 CE : 229-347-8	Eye irrit cat 2, Skin irrit cat 2 Specific target organ toxicity following single exposure, category 3 H315 H319 H335	O, R8, R9 Xi, R36/37/38	6 %	no

Other components :

Xanthan

*Laminaria digitata* powder and extract**SECTION 4 – FIRST AID MEASURES****4.1. Description of first aid measures**

In case of :

- Inhalation: not specifically concerned (aqueous liquid), provide fresh air.
- Eyes: rinse immediately and abundantly with water for 15 minutes, and consult an ophtalmologist.
- Skin: remove soiled clothes, rinse abundantly for 15 minutes. Consult a doctor in case of itching and redness.
- Ingestion: rinse mouth with water and drink large amounts of water. Consult a doctor immediately. Do not vomit.

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

Depending on the type of exposition: redness, stinging, itching, nausea, vomiting, diarrhea...

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

No further relevant information available.

**SECTION 5 – FIRE FIGHTING MEASURES****5.1. Extinguishing media**

**Suitable extinguishing agents:** all types of extinguishing agents are suitable (CO<sub>2</sub>, extinguishing powder, water spray, alcohol resistant foam...)

**Specific hazards:** possible emission of toxic fumes. Collect contaminated fire extinguishing water separately and eliminate according to applicable regulation

**Protective equipment :** fire-fighting masks

**5.2. Specific hazards arising from the substance or mixture**

No further information available, emissions resulting from combustion may contain nitrogen oxides and metal oxides

**5.3. Advice for firefighters**

Do not enter or stay in hazardous area without protective clothing and autonomous breathing equipment

**SECTION 6 – ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures**

Avoid contact with eyes and skin. Use protective gloves, and protective eyewear.

**6.2. Environmental precautions**

Contain spills. Do not reject directly in sewer or in the natural environment (surface or groundwater). Inform authorities of any spills.

**6.3. Methods and material for containment and cleaning up**

Do not dilute.

Absorb with liquid binding material. Dispose contaminated material as waste according to item 13.

Do not refill original packaging.

**6.4. Reference to other sections**

See section 8 for information on personal protective equipment

See section 13 for disposal information.

**SECTION 7 – HANDLING AND STORAGE****7.1. Precautions for safe handling**

Handling : use a chemical protection mask (P2), thick protection gloves, protective eyewear

Avoid spilling and accidental projections. Avoid contact with skin and eyes. Do not breathe vapors.

Do not eat, smoke or drink in work area. Wash hands before breaks and after using product.

**7.2. Conditions for safe storage, including incompatibilities**

Storage: in closed container, away from heat or freezing temperatures. Do not store close to food products or drinks, including animal feed. Stacking of pallets must be limited to 2 pallets.

Container: 1000 liter tank, 5 or 10 liter tank. Do not transfer to other containers. Keep product in original container, well closed and with original labeling.

**7.3. Specific end uses**

No further relevant information available

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

Advice for the workplace : work outdoors or insure a good ventilation/exhaustion at the workplace

Limit values for monitoring at the workplace : no studies have been carried out on the mixture

**8.2. Exposure controls**

Monitoring means : occupational health services

**Protective equipment**

**Breathing equipment :** when ventilation is insufficient, P2 filter against dust and aerosols

**Protection of skin:** gloves resistant against chemicals. Protective clothing (plastic sleeve covers, apron, gloves with sleeve covers, single use suits...) depending on use

**Protection of eyes :** protective eyewear

**Specific hygiene measures:** wash hands after handling product. Do not eat, smoke or drink during use of product.

**Protection of the environment:** Empty rinsing water of the original container into the spraying tank of machine for fertilizing.

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

**Appearance :** Green liquid

**Odor :** typical

**Density :** 1.414 – 1.430

**pH :** 4-6.02

**Solubility :** fully miscible

**Melting point :** Not determined

**Boiling point:** Not determined

**Decomposition temperature :** Not determined

**Vapor pressure:** not applicable.

**Danger of explosion :** not applicable

**Combustive properties :** not applicable

**9.2. Other information**

No further relevant information available

**SECTEUR 10 – STABILITY AND REACTIVITY****10.1 Reactivity**

No available data (no particular risks expected)

**10.2 Chemical stability**

The product is stable in the normal conditions of use.

The product may change colors in time, without alteration of its properties.

**10.3 Possibility of hazardous reactions**

No available data on the mixture. Calcium chloride may react violently when exposed to oxidizer or reducers.

**10.4 Conditions to avoid**

Storage at temperatures above 40 °C and below – 10°C. Avoid contamination by metals, dust, organic substances. Store away from heat, sparks and flames. Store away from direct sunlight.

**10.5 Incompatible materials**

May react with reducers, organic matter and bases

**10.6 Hazardous decomposition products**

No dangerous decomposition products known. In case of fire, see section 5.

**SECTION 11 – TOXICOLOGICAL INFORMATION****11.1 Information relative to toxicological effects**

No tests carried out on mixture

**Acute toxicity :** not classified

Data relative to componentsCalcium nitrate (60 %):

Inhalation: slightly irritant for respiratory tract / coughing, in case of over-exposition: headaches, respiratory difficulties, pulmonary oedema, vomiting, nausea, abdominal pain, gastro-intestinal pain, irritation of stomach and intestine mucous tissue.

Ingestion : after ingesting large quantities, tone of skin may turn blueish/greyish, vertigo, choc, blood in stools, modification of urine flow, modification of composition of urine, cramps / uncontrolled muscular contractions

Skin contact : slightly irritant for skin

Eye contact : slightly irritant for eyes

Component	Test	Result	Type of exposition	Species
Calcium nitrate	DL50	3900 mg/kg	orale	rat
Ammonium nitrate	DL50	2217 mg/kg	orale	rat
Ammonium nitrate	DL50	3000 mg/kg	cutanée	lapin

**Irritation /corrosion :** mixture not classified

**Sensitization :** mixture not classified

**Carcenogenicity :** no important or critical known effects

**Mutagenicity :** no important or critical known effects

**Toxicity for reproduction :** no important or critical known effects

**Chronical toxicity :** no important or critical known effects

## SECTION 12 – ECOLOGICAL INFORMATION

### 12.1 Toxicity

No studies have been carried out for the mixture.

#### Components :

##### Calcium nitrate (60 %):

Component	Result	Species	exposition
Calcium nitrate	Not known		
Ammonium nitrate	>9100 mg/l	fish	96 h

### 12.2 Persistence and degradability

Easily biodegradable.

### 12.3 Bioaccumulative potential

No bioaccumulation

### 12.4 Mobility in soil

Nitrates present in product are soluble in water. When they are not absorbed by plants, they may migrate to surface water or groundwater. Nitrate emissions may be regulated.

### 12.5 Results of PBT and vPvB assessments

No studies have been carried out on mixture

### 12.6 Other adverse effects

Excessive use may lead to effects on the environment: eutrophization of surface waters and contamination of groundwater.

## SECTION 13 – DISPOSAL CONSIDERATIONS

**13.1 Waste treatment method**

Residues: Must be disposed according to applicable regulations.

Must not be disposed in sewage system.

Destruction of packaging: Eliminate cardboard, pallet and containers according to applicable regulation.

Recommended cleaning agent: Empty rinsing water of the original container into the spraying tank of machine for fertilizing.

**SECTION 14 - TRANSPORT INFORMATION**

**14.1 UN Number :** not regulated

**14.2 UN shipping name :** not regulated

**14.3 Transport hazard class :**

Road (ADR 2011) : not regulated

Maritime (IDMG 2011) : not regulated

**14.4 Packing group :** not regulated

**14.5 Environmental hazards :** not regulated

**14.6 Specific precautions by the user :** no further information available

**14.7 Transport of bulk according to annex II of MARPOL 73/78 convention and IBC Code :** not applicable

**SECTION 15 – REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations specific for the substance or mixture :**

Hazard pictograms : Irritant

Hazard statements :

According to EC Directive 67/548/EC or 1999/45/EC :

Xi, R36/37/38

According to EC Regulation 1272/2008 :

Eye irrit cat 2,

Skin irrit cat 2

Specific target organ toxicity following single exposure, category 3

H315

H319

H335

**15.2 Chemical safety assessment**

A chemical safety assessment has not been carried out for the mixture. No exposition scenarios are available.

**SECTION 16 – OTHER INFORMATIONS**

The content and the format of the Material Safety Data Sheet comply with EC regulation 1907/2006 and regulation 453/2010.

Details of revision : new format

Risk phrases in section 2 :

According to EC Directive 67/548/EC or EC Directive 1999/45/EC :

Xi : irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

According to EC Regulation 1272/2008 :

H315 : Causes skin irritation

H319 : Causes serious eye irritation

H335 : May cause respiratory irritation

Risk phrases in section 3 :

According to EC Directive 67/548/EC or 1999/45/EC :

Xi : Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

According to EC Regulation 1272/2008 :

H315 : Causes skin irritation

H319 : Causes serious eye irritation

H335 : May cause respiratory irritation

O : Comburant

R8 : Contact with combustible material may cause fire.

R9 : Explosive when mixed with combustible material.

*This safety data sheet complements the technical instructions of use. The information is based on the current knowledge relative to the product on the date of the update of the document. The manufacturer will not be held responsible for consequences of the use of the product for uses other than the relevant identified use. This document shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*