



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 CaCl
Calcium chloride 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 EC Directive 1999/45/EC:

Xi : irritant

R36 : irritating to eyes

According to EC Regulation 1272/2008 :

Irrit eye 2 : serious eye damage/irritation

H319 : Causes serious eye irritation

2.2. Labeling elements

Labeling according to EC Directive 67/548/EC or EC Directive 1999/45/EC

Hazard pictogram :



Hazard statements :

Xi : irritant

R36 : irritant to eyes

Labeling according to CLP directive

Hazard pictogram :



Hazard statements :

Irrit eye 2 : serious eye damage/irritation

H319 : Causes serious eye irritation

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
Calcium chloride CAS : 10043-52-4 REACH : 01-211949219-28	Eye irrit 2 H319	Xi, R36	30-40 %	Classified according to conventional calculation method

Other components :

Carrageenan

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 (CO₂, 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 sulfur oxides and nitrogen oxides. Possible release of toxic fumes (CO, HCl, Cl₂).

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 rubber or latex 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, rubber or latex 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

Components with limit values to be monitored in the workplace :

Calcium chloride (30-40 %)

ELV (TWA) : 10 mg/m³

DNEL inhalation, worker, long term : 5 mg/m³

DNEL inhalation, worker, short term : 10 mg/m³

DNEL inhalation, population, long term : 2.5 mg/m³

DNEL inhalation, population, short term : 5 mg/m³

8.2. Exposure controls

Monitoring means : occupational health services

Protective equipment

Breathing equipment : P1 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 : 1.300-1.315

pH : 6.000-8.070

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 25 °C and below 5°C. Avoid contamination by metals, dust, organic substances. Store away from heat, sparks and flames. Store away from direct sunlight.

10.5 Incompatible materials

Acids, bases, reductive substances

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 components

Calcium chloride (30-40 %):

DL50 oral rat : 2301 mg/kg

DL50 dermal, rabbit > 5000 mg/kg

Acute toxicity ingestion : calcium chloride may irritate esophagus and stomach DL50 : 2301 mg/kg pc (rat) OECD method 401

Inhalation of dust : not concerned

Contact with eyes : irritant for eyes, category 2

Contact with skin : LD50 dermal > 5000 mg/kg pc

Long term exposition :

Ingestion : daily recommended intake of CaCl₂, no negative effect expected

Inhalation : not concerned

Contact with eyes : irritation

Irritation /corrosion : mixture not classified

Calcium chloride (30-40 %)

Not irritating on rabbit skin OECD 404, irritation of skin possible for sensitive individuals

Sensitization : mixture not classified

Calcium chloride is not a respiratory or dermal sensitizer.

Carcinogenicity : no available data for mixture

Calcium chloride (30-40 %)

Not cancerous effects

Mutagenicity : no data available for mixture

Calcium chloride (30-40 %)

Bacterial reverse mutation assay : negative for *Salmonella typhimurium* TA92, TA1535, TA100, TA1537, TA94, TA98

In vitro mammal chromosome aberration test : negative for lung fibroblasts of the Chinese hamster

Genotoxic properties assay : negative

Chronical toxicity : no available data for mixture

Calcium chloride (30-40 %)

Will not gain foetus or reproductive organs after an oral or dermal exposition or after inhalation, no systemic effects. No teratogenous effects after oral administration of calcium chloride for 3 species (mouse, rat, rabbit).

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity

No studies have been carried out for the mixture.

Components :

Calcium chloride (30-40 %)

Not classified as dangerous for the environment

Acute toxicity :

Fish (*Pimephales promelas*) : LC50 96 h : 460 mg/l, LC50 48 h > 6560 mg/l, LC50 24 h > 6660 mg/l EPA/600/4-90/027, EPA/600/6-91-003

Crustaceans (*Daphnia magna*) : LC50 48 h : 2400 mg/l OECD 202

Algae (*Selenastrum capricornutum*) EC50 72 h : 2900 mg/l based on biomass, EC50 72 h > 4000 mg/l based on growth rate OECD 201

Long term Toxicity:

Fish : no available data

Crustaceans (*Daphnia magna*) : EC50 : 610 mg/l based on reproduction disorders, EC16 : 320 mg/l based on reproduction disorders, LC50 : 920 mg/l based on mortality.

Plants : essential nutriment for plants, important role in the development of cell wall, cellular division, cell elongation and regulation of osmotic pressure in cells

Microorganisms : no undesirable effects suspected on wastewater treatment plants

12.2 Persistence and degradability

No negative impact expected on wastewater treatment plant. All components are degradable or biodegradable.

12.3 Bioaccumulative potential

No available data

12.4 Mobility in soil

All components are soluble in water.

12.5 Results of PBT and vPvB assessments

No studies have been carried out on mixture

12.6 Other adverse effects

No further relevant information

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 cardboards, pallet and container according to applicable regulations.

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 EC Directive 1999/45/EC:

Xi : irritant

R36 : irritant to eyes

According to EC Regulation 1272/2008 :

Irrit eye 2 : serious eye damage/irritation

H319 : Causes serious eye irritation

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 Directive 1999/45/CE :

Xi : irritant

R36 : irritant to eyes

According to EC Regulation 1272/2008 :

Irrit eye 2 : serious eye damage/irritation

H319 : Causes serious eye irritation

Risk phrases in section 3 :

Xi : Irritant

R 36 : irritating to eyes

Eye irrit 2 : Eye corrosion/irritation category 2

H319 : causes serious eye irritations

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.