



CALCIBOR

Safety Data Sheet dated 8/9/2015, version 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:
Trade name: CALCIBOR
Trade code: 160900

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

Recommended use:

Professional use.

Fertilizer for agricultural use

1.3. Details of the supplier of the safety data sheet

Company:
ALBA MILAGRO International spa
Via F. Corridoni 19 20015 Parabiago (MI) Italy
ph +39 0331495211

Competent person responsible for the safety data sheet:

reach@albamilagro.com


1.4. Emergency telephone number

Emergency telephone number of the company and/or of an authorised advisory centre (Monday to Friday from 8:30 to 12:30 and from 13:30 to 17:30):
ph +39 0331495211

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

 Warning, Eye Irrit. 2, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Symbols:



Warning

Hazard statements:

H319 Causes serious eye irritation.

Precautionary statements:

P264 Wash skin thoroughly after use.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P337+P313 If eye irritation persists: Get medical advice/attention.

ALBA MILAGRO International S.P.A.

Via Corridoni, 19 - 20015 Parabiago (MI) - ITALY
P.IVA - 11707620156

Tel. +39.0331.495211
Fax +39.0331.557957

milagro@albamilagro.com
www.albamilagro.com

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

20.7 % calcium chloride

REACH No.: 01-2119494219-28, Index number: 017-013-00-2, CAS: 10043-52-4, EC: 233-140-8



3.3/2 Eye Irrit. 2 H319

18.5 % Orthoboric acid compound with 2-aminoethanol

REACH No.: 01-2119548394-33, CAS: 26038-87-9, EC: 247-421-8

The mixture is not classified as dangerous according to EC Regulation 1272/2008 (CLP).

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

ALBA MILAGRO International S.P.A.

Via Corridoni, 19 - 20015 Parabiago (MI) - ITALY
P.IVA - 11707620156

Tel. +39.0331.495211
Fax +39.0331.557957

milagro@albamilagro.com
www.albamilagro.com

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

calcium chloride - CAS: 10043-52-4

TLV TWA - 10 mg/m³ SAEL (Solvay acceptable Exposure Limit) 2003

DNEL Exposure Limit Values

calcium chloride - CAS: 10043-52-4

ALBA MILAGRO International S.P.A.

Worker Industry: 10 mg/m³ - Consumer: 5 mg/m³ - Exposure: Human Inhalation Short Term, local effects
Worker Industry: 5 mg/m³ - Consumer: 2.5 mg/m³ - Exposure: Human Inhalation Long Term, local effects
Orhoboric acid compound with 2-aminoethanol - CAS: 26038-87-9
Worker Industry: 189.2 mg/kg bw / day - Consumer: 94.6 mg/kg bw / day - Exposure: Human Dermal Long Term, systemic effects
Worker Industry: 5.9 mg/m³ - Consumer: 1.4 mg/m³ - Exposure: Human Inhalation Long Term, systemic effects
Consumer: 1.7 mg/kg bw / day - Exposure: Human Oral Long Term, systemic effects

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties Value Method: Notes:

Appearance and colour: Clear liquid -- orange

Odour: not significant -- --

Odour threshold: Not Relevant -- --

pH: 5,5 -- --

Melting point / freezing point: Not Relevant -- --

Initial boiling point and boiling range: n.d. -- --

Flash point: Not Relevant -- --

Evaporation rate: n.d. -- --

Solid/gas flammability: Not Relevant -- --

Upper/lower flammability or explosive limits: Not Relevant -- --

Vapour pressure: n.d. -- --

Vapour density: n.d. -- --

Relative density: 1290 +/- 10 g/L -- --

Solubility in water: Completely miscible -- --

Solubility in oil: -- --

Partition coefficient (n-octanol/water): n.d. -- --

Auto-ignition temperature: n.d. -- --

ALBA MILAGRO International S.P.A.

Via Corridoni, 19 - 20015 Parabiago (MI) - ITALY
P.IVA - 11707620156

Tel. +39.0331.495211
Fax +39.0331.557957

milagro@albamilagro.com
www.albamilagro.com

Decomposition temperature: n.d. -- --
Viscosity: n.d. -- --
Explosive properties: n.d. -- --
Oxidizing properties: n.d. -- --
Properties Value Method: Notes:
Miscibility: n.d. -- --
Fat Solubility: n.d. -- --
Conductivity: n.d. -- --
Substance Groups relevant properties N.A. -- --

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:
N.A.

Toxicological information of the main substances found in the mixture:

calcium chloride - CAS: 10043-52-4

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rabbit = 1000 mg/kg - Source: (sol. 33%)

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

b) skin corrosion/irritation:

Test: Skin Irritant - Route: SOLUTION - Species: Rabbit Negative - Source: (solution)

d) respiratory or skin sensitisation:

Test: Skin Sensitization Negative

e) germ cell mutagenicity:

Test: Genotoxicity - Species: Generic Bacteria Negative

f) carcinogenicity:

Test: Carcinogenicity Negative

g) reproductive toxicity:

Test: Reproductive Toxicity - Route: Oral - Species: Rabbit Negative - Source: 169 mg/kg, 10 days NOAEL

Orthoboric acid compound with 2-aminoethanol - CAS: 26038-87-9

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 MGKGBW - Source: Gardner, J (1998)

Test: Skin Irritant - Route: Skin - Species: Rat > 2000 MGKGBW - Source: Kauffmann, H.M. Dr (2002a) - Notes: OECD Guideline 402

Test: Skin Irritant - Route: Skin - Species: Guinea pig = 2000 MGKGBW - Source: Kauffmann, H.M. Dr (2002b) - Notes: EU method B.6 Skin Sensitisation

ALBA MILAGRO International S.P.A.

Via Corridoni, 19 - 20015 Parabiago (MI) - ITALY
P.IVA - 11707620156

Tel. +39.0331.495211
Fax +39.0331.557957

milagro@albamilagro.com
www.albamilagro.com

- b) skin corrosion/irritation:
Test: Skin Irritant - Route: Skin - Species: Rabbit Negative - Source: (84/449/EEC 1984)
 - c) serious eye damage/irritation:
Test: Eye Irritant - Species: Rabbit Negative - Source: Cerven D r (2001) - Notes: EPA OPPTS 870.2400
Acute Eye Irritation
 - d) respiratory or skin sensitisation:
Test: Skin Sensitization - Route: Skin - Species: Guinea pig Negative - Source: Ehling, G, Dr (2002) - Notes:
Eu Method B.6 Skin Sensitisation
 - e) germ cell mutagenicity:
Test: Genotoxicity - Species: Generic Bacteria Negative - Source: Kauffmann, H.M. Dr (2002b) - Notes:
Ames test - OECD Guideline 471
- calcium chloride - CAS: 10043-52-4
LD50 (RAT) ORAL: 1000 MG/KG

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

calcium chloride - CAS: 10043-52-4

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 9500-11300 mg/l - Duration h: 96 - Notes: Lepomis macrochirus

Endpoint: LC50 - Species: Fish = 4630 mg/l - Duration h: 96 - Notes: Pimephales promelas

Endpoint: EC50 - Species: Crustacean = 2400 mg/l - Duration h: 48 - Notes: Daphnia magna

Endpoint: LC50 - Species: Crustacean = 1830 mg/l - Notes: Ceriodaphnia sp.

Endpoint: EC50 - Species: Algae = 2900 mg/l - Duration h: 72 - Notes: Selenastrum capricornutum

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Crustacean = 320 ml/l - Notes: Daphnia magna, 21 days

Orthoboric acid compound with 2-aminoethanol - CAS: 26038-87-9

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 3 - Notes: Brachydanio rerio - OECD Guideline 203

Endpoint: EC50 - Species: Daphnia > 1000 mg/l - Duration h: 24 - Notes: OECD Guideline 202

Endpoint: LC50 - Species: Algae = 26 mg/l - Duration h: 72 - Notes: Pseudokirchnerella subcapitata OECD Guideline 201

12.2. Persistence and degradability

None

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

ALBA MILAGRO International S.P.A.

Via Corridoni, 19 - 20015 Parabiago (MI) - ITALY
P.IVA - 11707620156

Tel. +39.0331.495211
Fax +39.0331.557957

milagro@albamilagro.com
www.albamilagro.com

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

N.A.

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

N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

Where applicable, refer to the following regulatory provisions :

Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):

N.A.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Text of phrases referred to under heading 3:

H319 Causes serious eye irritation.

This safety data sheet has been completely updated in compliance to Regulation 2015/830.

This document was prepared by a competent person who has received appropriate training.

ALBA MILAGRO International S.P.A.

Via Corridoni, 19 - 20015 Parabiago (MI) - ITALY
P.IVA - 11707620156

Tel. +39.0331.495211
Fax +39.0331.557957

milagro@albamilagro.com
www.albamilagro.com

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

WGK: German Water Hazard Class.

ALBA MILAGRO International S.P.A.

Via Corridoni, 19 - 20015 Parabiago (MI) - ITALY
P.IVA - 11707620156

Tel. +39.0331.495211
Fax +39.0331.557957

milagro@albamilagro.com
www.albamilagro.com