



F-Max CalMag

SDS = Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 3/18/2021 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Product name : F-Max CalMag
Product code : 300.582.000

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Fertiliser

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

F-MAX
Gochsestraat 24B
6851JE Huissen - The Netherlands
T +31 6-16393840
info@f-max.eu - www.f-max.eu

1.4. Emergency telephone number

Emergency number : National Poisons Information Service
+44 870 600 6266
worldwide: <http://www.who.int/ipcs/poisons/centre/directory/en>

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] Mixtures/Substances: SDS EU > 2015: According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)

Acute toxicity (oral), Category 4 H302
Serious eye damage/eye irritation, Category 1 H318
Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available. Harmful if swallowed. Causes serious eye damage.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS07

CLP Signal word : Danger
Contains : calcium nitrate, anhydrous
Hazard statements (CLP) : H302 - Harmful if swallowed.
H318 - Causes serious eye damage.
Precautionary statements (CLP) : P280 - Wear protective gloves, protective clothing, eye protection.
P301+P312 - IF SWALLOWED: Call a POISON CENTER, doctor if you feel unwell.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER, a doctor.

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P330 - Rinse mouth.
P501 - Dispose of contents and container to Remove to an authorized waste treatment plant.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|----------------------------|--|--------------|---|
| calcium nitrate, anhydrous | CAS-No.: 10124-37-5 EC-No.: 233-332-1 REACH-no: 01-2119495093-35 | 20.35 – 30.7 | Ox. Sol. 3, H272 Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|---|
| First-aid measures general | : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Call a poison center or a doctor if you feel unwell. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. |
| First-aid measures after skin contact | : Wash immediately with lots of water. Soap may be used. In all cases of doubt, or when symptoms persist, seek medical attention. Wash skin with plenty of water. |
| First-aid measures after eye contact | : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist if irritation persists. Rinse cautiously with water for several minutes. Call a physician immediately. |
| First-aid measures after ingestion | : Rinse mouth with water. Do not induce vomiting. Drink two glasses of water. Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital. Rinse mouth. Call a poison center or a doctor if you feel unwell. |

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

| | |
|-------------------------------------|--|
| Symptoms/effects after inhalation | : None under normal use. |
| Symptoms/effects after skin contact | : Contact during a long period may cause light irritation. |
| Symptoms/effects after eye contact | : Pain. Redness of the eye tissue. May cause severe irritation. Serious damage to eyes. |
| Symptoms/effects after ingestion | : Nausea. Vomiting. Diarrhoea. AFTER INGESTION OF HIGH QUANTITIES: Disturbances of heart rate. Respiratory difficulties. |
| Chronic symptoms | : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Gastrointestinal complaints. |

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : EXTINGUISHING MEDIA FOR SURROUNDING FIRES: All extinguishing media allowed. Adapt extinguishing media to the environment. Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non combustible. Not flammable.
Explosion hazard : Not applicable.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.
Protection during firefighting : Fire fighters have to wear suited clothing and an independent respiratory device (SCBA) that covers the face completely with pressure. Clothing for fire fighters (including helmets, protective boots and gloves) according to European Regulation EN 469, give a basic protection level for an incident with chemicals. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ensure adequate ventilation.

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing. Concerning personal protective equipment to use, see section 8.
Emergency procedures : Ventilate spillage area. Clear the danger area. Notify experts. Mark the danger area. Corrosion-proof appliances. Wash contaminated clothes. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Wear suitable protective clothing. Reactivity hazard: compressed air/oxygen apparatus. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

For containment : Plug the leak, cut off the supply. Dam up the liquid spill. Clean spills promptly.
Methods for cleaning up : Take up liquid spill into absorbent material. Collect all waste in suitable and labelled containers and dispose according to local legislation. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Scoop absorbed substance into closing containers. Wash down leftovers with plenty of water. Wash clothing and equipment after handling.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

Concerning personal protective equipment to use, see item 8. Concerning disposal elimination after cleaning, see item 13. For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Ensure adequate ventilation. Use personal protective equipment as required. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep container tightly closed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Avoid contact with skin and eyes. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Keep container closed when not in use.
- Storage conditions : Store in original container. Store in a well-ventilated place. Keep cool.
- Storage temperature : 10 – 30 °C
- Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources.
- Storage area : Keep container in a well-ventilated place. Keep out of direct sunlight. Meet the legal requirements.
- Special rules on packaging : meet the legal requirements. correctly labelled. Secure fragile packagings in solid containers.
- Packaging materials : SUITABLE MATERIAL: stainless steel, synthetic material.

7.3. Specific end use(s)

Fertilisers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.2.2. Personal protection equipment

Personal protective equipment:

Safety glasses. Gloves. Protective clothing.

Personal protective equipment symbol(s):



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8.2.2.1. Eye and face protection

Eye protection:

Eye protection. Safety glasses

| Eye protection | | | |
|----------------|----------------------|-----------------|----------|
| Type | Field of application | Characteristics | Standard |
| Safety glasses | | | EN 166 |

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing.

Hand protection:

Protective gloves

| Hand protection | | | | | |
|-----------------|-----------------------|-------------------|----------------|-------------|------------|
| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
| | Latex, Nitrile rubber | 6 (> 480 minutes) | | | EN ISO 374 |

8.2.2.3. Respiratory protection

Respiratory protection:

Respiratory protection not required in normal conditions. Ensure adequate air ventilation.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Regular cleaning of equipment, work area and clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|---------------------|
| Physical state | : Liquid |
| Appearance | : Clear liquid. |
| Colour | : light yellow. |
| Odour | : odourless. |
| Odour threshold | : No data available |
| pH | : 5.5 |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : Not applicable |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Not applicable |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Density | : 1.25 kg/l |
| Solubility | : Soluble in water. |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Viscosity, kinematic | : No data available |

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| | |
|----------------------|-----------------------------|
| Viscosity, dynamic | : No data available |
| Explosive properties | : Product is not explosive. |
| Oxidising properties | : Not oxidizing. |
| Explosive limits | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts violently with (some) acids/bases.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

May react violently with reducing agents.

10.4. Conditions to avoid

Avoid high temperatures. Keep out of frost.

10.5. Incompatible materials

May be corrosive to metals. Keep away from : Strong acids. Oxidizing agent. Reducing agent. Halogens. Strong bases.

10.6. Hazardous decomposition products

On heating/burning: release of toxic and corrosive gases/vapours nitrous vapours sulphur oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------|-------------------------|
| Acute toxicity (oral) | : Harmful if swallowed. |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |

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| | |
|----------------|---------------------------|
| ATE CLP (oral) | 1189.532 mg/kg bodyweight |
|----------------|---------------------------|

calcium nitrate, anhydrous (10124-37-5)

| | |
|-----------------|-----------------------------|
| LD50 oral rat | 300 – 2000 mg/kg bodyweight |
| LD50 dermal rat | > 2000 mg/kg bodyweight |

| | |
|-----------------------------------|---|
| Skin corrosion/irritation | : Not classified pH: 5.5 |
| Serious eye damage/irritation | : Causes serious eye damage. pH: 5.5 |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |

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SECTION 12: Ecological information

12.1. Toxicity

| | |
|---|---|
| Ecology - general | : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |
| Hazardous to the aquatic environment, short-term (acute) | : Not classified |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified |

calcium nitrate, anhydrous (10124-37-5)

| | |
|----------------------|-------------|
| LC50 - Fish [1] | 1378 |
| EC50 - Crustacea [1] | 490 mg/l |
| ErC50 algae | > 1700 mg/l |
| NOEC (acute) | 180 mg/l |

12.2. Persistence and degradability

calcium nitrate, anhydrous (10124-37-5)

| | |
|-------------------------------|--|
| Persistence and degradability | Biodegradable in the soil. Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |

12.3. Bioaccumulative potential

calcium nitrate, anhydrous (10124-37-5)

| | |
|---------------------------|----------------------|
| Bioaccumulative potential | Not bioaccumulative. |
|---------------------------|----------------------|

12.4. Mobility in soil

calcium nitrate, anhydrous (10124-37-5)

| | |
|----------------|---|
| Ecology - soil | No (test)data on mobility of the substance available. |
|----------------|---|

12.5. Results of PBT and vPvB assessment

| Component | |
|---|---|
| calcium nitrate, anhydrous (10124-37-5) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

12.6. Other adverse effects

| | |
|-----------------------|--|
| Other adverse effects | : No additional information available. |
|-----------------------|--|

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|-----------------------------------|---|
| Regional legislation (waste) | : Disposal must be done according to official regulations. |
| Waste treatment methods | : Do not discharge into drains or rivers. Recycle product or dispose properly. Remove to an authorized waste treatment plant. Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Sewage disposal recommendations | : Disposal must be done according to official regulations. |
| European List of Waste (LoW) code | : 06 03 14 - solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13 |

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SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number

| | |
|---------------|------------------|
| UN-No. (ADR) | : Not applicable |
| UN-No. (IMDG) | : Not applicable |
| UN-No. (IATA) | : Not applicable |
| UN-No. (ADN) | : Not applicable |
| UN-No. (RID) | : Not applicable |

14.2. UN proper shipping name

| | |
|-----------------------------|------------------|
| Proper Shipping Name (ADR) | : Not applicable |
| Proper Shipping Name (IMDG) | : Not applicable |
| Proper Shipping Name (IATA) | : Not applicable |
| Proper Shipping Name (ADN) | : Not applicable |
| Proper Shipping Name (RID) | : Not applicable |

14.3. Transport hazard class(es)

| | |
|----------------------------------|------------------|
| ADR | |
| Transport hazard class(es) (ADR) | : Not applicable |

| | |
|-----------------------------------|------------------|
| IMDG | |
| Transport hazard class(es) (IMDG) | : Not applicable |

| | |
|-----------------------------------|------------------|
| IATA | |
| Transport hazard class(es) (IATA) | : Not applicable |

| | |
|----------------------------------|------------------|
| ADN | |
| Transport hazard class(es) (ADN) | : Not applicable |

| | |
|----------------------------------|------------------|
| RID | |
| Transport hazard class(es) (RID) | : Not applicable |

14.4. Packing group

| | |
|----------------------|------------------|
| Packing group (ADR) | : Not applicable |
| Packing group (IMDG) | : Not applicable |
| Packing group (IATA) | : Not applicable |
| Packing group (ADN) | : Not applicable |
| Packing group (RID) | : Not applicable |

14.5. Environmental hazards

| | |
|-------------------------------|--|
| Dangerous for the environment | : No |
| Marine pollutant | : No |
| Other information | : No supplementary information available |

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

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Rail transport

Not applicable

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list $\geq 0,1\%$ / SCL

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

Waterbezwaarlijkheid : 11 - Weinig schadelijk voor in het water levende organismen

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Borstvoeding

NIET-limitatieve lijst van voor de voortplanting : None of the components are listed

giftige stoffen – Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting : None of the components are listed

giftige stoffen – Ontwikkeling

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Switzerland

Storage class (LK) : LK 8 - Corrosive materials

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms

| | |
|-------|---|
| CLP | CLP = Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 |
| SDS | SDS = Safety Data Sheet |
| REACH | REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| EC50 | Median effective concentration |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| NOEC | No-Observed Effect Concentration |
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |

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Abbreviations and acronyms

| | |
|---------|---|
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| COD | Chemical oxygen demand (COD) |
| DMEL | DMEL = Derived Minimal Effect level |
| DNEL | DNEL = Derived-No Effect Level |
| EC-No. | European Community number |
| EN | European Standard |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limit |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | PNEC = Predicted No-Effect Concentration |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| STP | Sewage treatment plant |
| ThOD | Theoretical oxygen demand (ThOD) |
| TLM | Median Tolerance Limit |
| VOC | Volatile Organic Compounds |
| CAS-No. | Chemical Abstract Service number |
| N.O.S. | Not Otherwise Specified |
| vPvB | zPzB = Very Persistent and Very Bioaccumulative |
| ED | Endocrine disrupting properties |

Data sources

: ECHA Website: Information on Registered Substances
Handbook of Chemistry and Physics CRC Press Inc
Information suppliers
BIG-database.

Other information

: **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

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Full text of H- and EUH-statements

| | |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Ox. Sol. 3 | Oxidising Solids, Category 3 |
| H272 | May intensify fire; oxidiser. |
| H302 | Harmful if swallowed. |
| H318 | Causes serious eye damage. |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.