**PRODUCT SAFETY DATA SHEET for CaO**

Prepared in accordance with Annex II of the REACH Regulation EC 1907/2006, as amended

Current version: 2.2/EN_CZ | Superseded version: 2.1/EN

Revision date: December 2025 | Printing date: December 2025

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

## 1.1 Product identifier

| | |
|---|---|
| Substance name | Calcium oxide |
| Synonyms | Lime, burnt lime, Un-slaked lime, Building lime, Calcia, Fat lime, Chemical lime, Fluxing lime, Hard burnt lime, Soft burnt lime, Pebble lime, Calcium oxide, Calcium monoxide, Quick lime, Calcined limestone |
| Trade name | White lime 90 - EN 459-1 CL90-Q<br>White lime 80 - EN 459-1 CL90-Q<br>White lime 90 – Feinkalk<br>Lime for steel production, Class I., reactivity A, type 10 - 63 |
| Chemical name | Calcium oxide |
| Chemical formula | CaO |
| CAS: | 1305-78-8 |
| EINECS: | 215-138-9 |
| Molar mass: | 56,08 g/mol |
| REACH Registration number: | 01-2119475325-36-0011 |

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

| | |
|---|---|
| Relevant identified uses | iron and steel production.<br>Cellulose and paper production.<br>Construction materials production.<br>Industrial use for production of chemical substances and intermediary products.<br>Municipal and industrial waste processing.<br>Water and wastewater treatment.<br>Waste gas treatment.<br>Soil stabilization.<br>Sugar processing.<br>Engineering and landscaping.<br>Mining operations<br>Mortar and plaster (indoor and outdoor) production |

See Annex “Exposure Scenarios” for a comprehensive list of identified uses with their respective exposure scenarios.

| | |
|---|---|
| Uses advised against | There are no uses advised against |

## 1.3 Details of the supplier of the safety data sheet

| | |
|---|---|
| Manufacturer/Supplier | Calmit, spol. s r. o. |
| Street address | Gaštanová 15, 811 04 Bratislava |
| Country | Slovakia |
| Business ID | 361 72 162 |
| Phone N° | +421 2 5465 4298 |
| Fax N° | +421 2 5477 7439 |
| E-mail | office@calmit.sk |

### 1.4 Emergency telephone number

| | |
|---|---|
| European Emergency N° | 112 |
| Toxikologické informační středisko (TIS) N° | +420 224 919 293 nebo +420 224 915 402 |

Comments – Laické i lékařské dotazy na AKUTNÍ INTOXIKACE lidí a zvířat se řeší výhradně na přímých telefonních linkách TIS po 24 hod denně.

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP)**

| | |
|---|---|
| STOT SE 3; | H335 |
| Skin Irrit. 2; | H315 |
| Eye Dam.1; | H318 |

**2.1.2 Additional information**

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

### 2.2 Label elements

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

Hazard pictogram:

Signal word: **Danger**

Hazard statements:

| | |
|---|---|
| H315 | Causes skin irritation |
| H318 | Causes serious eye damage |
| H335 | May cause respiratory irritation |

Precautionary statements:

| | |
|---|---|
| Precautionary statements - prevention | |
| P102 | Keep out of reach of children |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray |
| P280 | Wear protective gloves / protective clothing / ye protection / face protection |
| Precautionary statements - response | |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304+P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. |
| Precautionary statements - disposable | |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations |

### 2.3 Other hazards

The substance does NOT meet the criteria for PBT or vPvB substance according to Regulation (EC) No 1907/2006, Annes XIII.
The substance does not have endocrine-disrupting properties in accordance with the criteria set out in Commission Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.
Substance is not on the candidate list of SVHC substances.
Environmental effects - If a large amount of the product is accidentally released into water sources or streams, ecotoxic effects may occur due to an increased pH value.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Main constituent

| | |
|---|---|
| Name | Calcium oxide |
| CAS | 1305-78-8 |
| EINECS | 215-138-9 |
| Content in % by weight | 92 - 100 % |

Impurities

No impurities relevant for classification and labelling.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

General advice

Take off contaminated clothing. If you experience any health issues or have any doubts, seek medical attention. Show this safety data sheet to the doctor in attendance. No known delayed effects.

Following inhalation

Leave the exposed workplace as quickly as possible. Further inhalation can be prevented by breathing through a cloth (work clothes, handkerchief). Breathe fresh air. Rinse the mouth. Seek medical attention immediately.

Following skin contact

Carefully remove coarse dust from the skin mechanically, remove contaminated clothing, and rinse the affected skin thoroughly with clean water and soap for at least 5 minutes. Treat the skin with a suitable regenerative cream. Seek medical attention if necessary.

Following eye contact

Rinse with plenty of water for at least 20 minutes (with eyelids open). Remove contact lenses, if easy to do so. Carefully remove solid particles from the eye so as not to injure it. Calcium oxide clusters formed by reaction with moisture and proteins in the eye are difficult to remove by rinsing. Seek medical attention immediately. The speed of treatment is crucial.

Following ingestion

DO NOT INDUCE VOMITING. Rinse mouth with clean water. Seek medical attention immediately and show the attending doctor this SDS or the container or label.

Self-protection of the first aider

Avoid inhalation, contact with skin, eyes, and clothing. Ensure adequate ventilation or use appropriate respiratory protection. Use appropriate protective equipment (see Section 8).

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

Calcium oxide is not acutely toxic via the oral, dermal, or inhalation route. The substance is classified as irritating to skin and the respiratory tract and entails a risk of serious damage to the eye. There is no concern for adverse systemic effects because local effects (pH-effect) are the major health hazard.

| | |
|---|---|
| Following inhalation | It manifests itself as a burning sensation, coughing, and sore throat. |
| Following skin contact | It manifests itself in roughening and drying of the skin, reddening, burns, blisters, and pain. |
| Following eye contact | It manifests itself as redness, pain, and severe deep burns. |
| Following ingestion | Symptoms include burning sensation, pain and cramps in the abdominal cavity, and vomiting. |

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

Follow the advises given in section 4.1

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media: The product is not flammable, but the heat generated during the extinguishing of lime may cause flammable substances to ignite. Use a dry powder, foam or $CO_2$ fire extinguisher to extinguish the surrounding fire. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: Do not use water. If water must be used to extinguish other combustible materials, the area must be flooded with enough of water so that it absorbs the heat generated by the chemical reaction with lime.

### 5.2 Special hazards arising from the substance or mixture

Calcium oxide exothermically reacts with water generating heat in the process. This presents a potential risk for nearby flammable materials. At the same time, it transforms into calcium dihydroxide due to the reaction with water, which in presence of water attacks certain metals (i.e. aluminium and brass) to form hydrogen gas.

### 5.3 Advice for firefighters

Avoid generation of dust. Use self-contained breathing apparatus (SCBA) with chemical resistant gloves. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

**6.1.1 For non-emergency personnel**

Ensure adequate ventilation. Keep dust levels to a minimum. Keep unprotected persons away. Avoid contact with skin, eyes, and clothing - wear suitable protective equipment (see Section 8). Avoid inhalation of dust - ensure that sufficient ventilation or suitable respiratory protective equipment is used, wear suitable protective equipment (see Section 8). Prevent any contact with moisture.

#### 6.1.2 For emergency responders

Keep dust levels to a minimum. Ensure adequate ventilation. Keep unprotected persons away. Avoid contact with skin, eyes, and clothing - wear suitable protective equipment (see section 8). Avoid inhalation of dust - ensure that sufficient ventilation or suitable respiratory protective equipment is used, wear suitable protective equipment (see section 8). Prevent any contact with moisture.

### 6.2 Environmental precautions

Contain the spillage. Keep the material dry if possible. Cover area, if possible, to avoid unnecessary dust hazard. Avoid uncontrolled spills to watercourses and drains (pH increase). Any large spillage into watercourses must be alerted to the Environment Agency or other regulatory body.

### 6.3 Methods and material for containment and cleaning up

In all cases avoid dust formation. Keep the material dry if possible. Pick up the product mechanically in a dry way. Use vacuum suction unit or shovel to transfer it into appropriate bags.

### 6.4 Reference to other sections

For more information on exposure controls/personal protection and disposal considerations, please check Section 8 and 13, respectively. For exposure scenarios see the annex of this safety data sheet.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### 7.1.1 Protective measures

Avoid contact with skin and eyes. Wear protective equipment (refer to section 8 of this safety data sheet). Do not wear contact lenses when handling this product. It is also advisable to have an individual pocket eyewash. Prevent dust generation. Enclose dust sources, use exhaust ventilation (dust collector at handling points). Handling systems should preferably be enclosed. When handling bags usual precautions should be paid to the risks outlined in the Council Directive 90/269/EEC.

#### 7.1.2 Advice on general occupational hygiene

Avoid inhalation, ingestion, and contact with skin and eyes. Follow general occupational hygiene principles such as good personal and work practices (e.g., proper regular cleaning), no eating, drinking, or smoking in the workplace. Shower and change clothes at the end of the work shift. Do not wear contaminated clothing at home.

### 7.2 Conditions for safe storage, including any incompatibilities

The substance must be stored in a dry environment, separate from acids, large quantities of paper, straw and nitro compounds. Any contact with air and moisture must be prevented. Large-scale storage must be in designated silos. Do not store together with food and feed. For packaged products on pallets, stack a maximum of 2 pallets on top of each other. Keep out of reach of children. Do not use aluminium for transport or storage if there is a risk of contact with water.

### 7.3 Specific end use(s)

See the appendix of this SDS, for relevant exposure scenarios. Section 2.1 details for each exposure scenario „Control of worker exposure“.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

*Table - Control parameters for CaO.*

| Substance | Parameter | Limit value [mg/m³] | Legal basis |
|---|---|---|---|
| Respirabilní frakce aerosolu CaO | PEL* | 1 | 361/2007 Sb. *** |
| Respirabilní frakce aerosolu CaO | NPK-P** | 4 | 361/2007 Sb. *** |

* přípustný expoziční limit - celosměnový časově vážený průměr koncentrací plynů, par nebo aerosolů v pracovním ovzduší, jimž může být podle současného stavu znalostí exponován zaměstnanec v osmihodinové nebo kratší směně týdenní pracovní doby, aniž by u něho došlo i při celoživotní pracovní expozici k poškození zdraví, k ohrožení jeho pracovní schopnosti a výkonnosti.

** nejvyšší přípustná koncentrace - koncentrace chemické látky, které mohou být zaměstnanci exponováni nepřetržitě po krátkou dobu, aniž by pociťovali dráždění očí nebo dýchacích cest nebo bylo ohroženo jejich zdraví a spolehlivost výkonu práce. Při hodnocení pracovního ovzduší lze porovnávat s nejvyšší přípustnou koncentrací časově vážený průměr koncentrace této látky měřené po dobu nejvýše 15 minut, během osmihodinové směny nejvýše 4 s odstupem nejméně jedné hodiny.

*** NAŘÍZENÍ VLÁDY ze dne 12. prosince 2007, kterým se stanoví podmínky ochrany zdraví při práci Vláda nařizuje podle § 21 písm. a) zákona č. 309/2006 Sb., kterým se upravují další požadavky bezpečnosti a ochrany zdraví při práci v pracovněprávních vztazích a o zajištění bezpečnosti a ochrany zdraví při činnosti nebo poskytování služeb mimo pracovněprávní vztahy (zákon o zajištění dalších podmínek bezpečnosti a ochrany zdraví při práci), a k provedení zákona č. 262/2006 Sb., zákoník práce, ve znění pozdějších předpisů.

Environmental values - Predicted no effect concentration (PNEC)

PNEC aqua = 370 µg/l

PNEC soil/groundwater= 816 mg/l

For more information see the Appendix.

## 8.2 Exposure controls

To control potential exposures, generation of dust should be avoided. Appropriate protective equipment is recommended. Eye protection equipment (e.g. goggles or visors) must be worn, unless potential contact with the eye can be excluded by the nature and type of the application (i.e. closed process). Additionally, face protection, protective clothing and safety shoes are required to be worn as appropriate.

Please check the relevant exposure scenario, given in the Appendix.

### 8.2.1 Appropriate engineering controls

If user operations generate dust, use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne dust levels below recommended exposure limits.

### 8.2.2 Personal protective equipment

#### 8.2.2.1 Eye and face protection

Do not wear contact lenses. Wear appropriate eye protection to prevent eye contact. For powders wear tight fitting goggles with side shields, or wide-vision full goggles. It is also advisable to have individual pocket eyewash.

#### 8.2.2.2 Skin protection

*Hand protection*: Wear protective gloves made of:

| | |
|---|---|
| Material | Nitrile rubber |
| Thickness of the glove material | Short-term – 0.12 mm |
| | Long-term – 0.3 mm |
| Breakthrough time | > 480 minutes |

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

*Other skin protection:* Wear appropriate personal protective clothing to avoid skin contact. Recommended: Standard working clothes fully covering skin, full length trousers, long sleeved overalls, with close fittings at openings and shoes resistant to caustics and avoiding dust penetration are required be worn.

#### 8.2.2.3 Respiratory protection

It is recommended to use local ventilation to keep the concentration below the established threshold values. A suitable particle filter mask is recommended (at least FFP2), depending on the expected exposure levels - please check the relevant exposure scenario, given in the enclosed Appendix.

#### 8.2.2.4 Thermal hazards

The substance does not pose a thermal hazard when stored and handled correctly, therefore no special measures are required (see Section 7).

### 8.2.3 Environmental exposure controls

Avoid releasing the substance to the environment. The exhaust from the ventilation systems shall be filtered prior to discharge to the atmosphere. Contain any spillage. Keep away from drains, surface and ground water. Any large spillage into watercourses must be alerted to the regulatory authority responsible for the environmental protection or other relevant regulatory body. For detailed explanations of the risk management measures that adequately control exposure of the environment to the substance please check the relevant exposure scenario, available in the Appendix of this SDS.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| Physical state | Solid |
| Colour | White of off-white (beige) |
| Odour | Odourless |
| Melting point | > 450 °C (study result, EU A. 1 method) |
| Boiling point | Not applicable (solid with melting point > 450 °C) |
| Flammability | Non-flammable (study result, EU A. 10 method) |
| Explosion limits | Non-explosive (void of any chemical structures commonly associated with explosive properties) |
| Flash point | Not applicable (solid with melting point > 450 °C) |
| Autoignition temperature | No relative autoignition temperature below 400 °C (study result, EU A. 16 method) |
| Decomposition temperature | > 450 °C |
| pH | 12.3 (saturated solution at 20 °C) |
| Viscosity | Not applicable (solid with melting point > 450 °C) |
| Solubility in water | 1337.6 mg/L (study result, EU A.6 method) |
| Partition coefficient | Not applicable (inorganic substance) |
| Vapour pressure | Not applicable (solid with melting point > 450 °C) |
| Relative density | 3.31 (study result, EU A.3 method) |

| | |
|---|---|
| Relative vapour density | Not applicable |
| Evaporation rate | Not applicable (solid with melting point > 450 °C) |
| Oxidising properties | none (based on the chemical structure, the substance does not contain a surplus oxygen or any structural groups known to be correlated with a tendency to react exothermally with combustible material) |
| Particle characteristics | Fineness P1 - sieve passage 0.20 mm ≥ 95 % (Air white lime 90 unslaked – EN 459-1 CL 90 – Q, Air white lime 80 unslaked – EN 459-1 CL 80 – Q, Air white lime 90 unslaked – Feinkalk)<br>Fineness $P_{sv}$ - according to customer requirements (Air white lime 90 unslaked – EN 459-1 CL 90 – Q, Air white lime 80 unslaked – EN 459-1 CL 80 – Q)<br>Sieve size < 10 mm (Lime for steel production, Class I, reactivity A, type 10 – 63) |

### 9.2 Other information

None.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

It reacts violently with acids, halogens, and metals. It reacts exothermically with strong acids and water. It also reacts with organic substances. When reacting with water, calcium hydroxide is formed, which reacts with metals (e.g., aluminium and brass) to produce hydrogen gas and also absorbs $CO_2$ from the atmosphere.

### 10.2 Chemical stability

Under normal conditions of use and storage (in dry conditions), calcium oxide is stable.

### 10.3 Possibility of hazardous reactions

Calcium oxide strongly reacts with water and generates heat. This may cause risk to flammable material. In presence of water, it attacks metals (i.e. aluminium and brass) to form hydrogen gas.

### 10.4 Conditions to avoid

Minimise exposure to air and moisture to avoid degradation.

### 10.5 Incompatible materials

Strong acids, organic substances, halogens, metals, water, and moisture. When reacting with aluminium and brass in the presence of water, hydrogen is produced:

$CaO + 2\ Al + 7\ H_2O \rightarrow Ca[Al(OH)_4]_2 + 3\ H_2$

### 10.6 Hazardous decomposition products

None. It absorbs carbon dioxide and moisture from the air, producing calcium carbonate, which is a common substance in nature.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### 11.1.1 Acute toxicity

Oral $LD_{50}$ > 2000 mg/kg bw (OECD 425, rat)

Dermal $LD_{50}$ > 2500 mg/kg bw (OECD 402, rabbit) (determined for $Ca(OH)_2$, but this result can also be applied to calcium oxide (read across), because calcium hydroxide is formed upon contact with water)

Inhalation Data not available.

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

#### 11.1.2 Skin corrosion/irritation

Calcium oxide is irritating to skin *(*OECD 404, *in vivo,* rabbit).

Based on experimental results, calcium oxide requires classification as irritating to skin; [Skin Irrit 2 (H315 - Causes skin irritation)].

#### 11.1.3 Serious eye damage/irritation

Calcium oxide entails a risk of serious damage to the eye (eye irritation studies *in vivo,* rabbit). Based on experimental results, calcium oxide is classified as severely irritating to the eye [Eye Damage 1 (H318 - Causes serious eye damage)].

#### 11.1.4 Respiratory or skin sensitisation

No data available. Calcium oxide is considered not to be a skin sensitiser, based on the nature of the effect (pH increase) and the essential requirement of calcium in human nutrition. Classification for sensitisation is not warranted.

#### 11.1.5 Germ cell mutagenicity

Bacterial reverse mutation assay (Ames test, OECD 471): Negative. No indications of human germ cell mutagenicity exist. Classification for mutagenicity is not warranted.

#### 11.1.6 Carcinogenicity

Calcium (administered as Ca-lactate) is not carcinogenic (experimental result, rat). The pH effect of calcium oxide does not give rise to a carcinogenic risk. Human epidemiological data support lack of any carcinogenic potential of calcium oxide. Classification for carcinogenicity is not warranted.

#### 11.1.7 Reproductive toxicity

Calcium (administered as Ca-carbonate) is not toxic to reproduction (experimental result, mouse). The pH effect does not give rise to a reproductive risk. Human epidemiological data support lack of any potential for reproductive toxicity of calcium oxide. No indications of human reproductive toxicity exist. Classification due to reproductive toxicity is not justified.

#### 11.1.8 STOT-single exposure

Based on human studies (SCOEL, 2008), calcium oxide is classified as irritating to respiratory system [STOT SE 3; H335 - May cause respiratory irritation].

#### 11.1.9 STOT-repeated exposure

Toxicity of calcium via the oral route is addressed by the upper intake levels (UL) for adults determined by the Scientific Committee on Food (SCF), evaluated at UL = 2 500 mg/day, corresponding to 36 mg/kg bodyweight/day (70 kg person) for calcium. Toxicity of calcium oxide via the dermal route is not considered as relevant in view of the anticipated insignificant

absorption through skin and due to local irritation as the primary health effect (pH shift). Toxicity via inhalation (local effect, irritation of mucous membranes) is addressed by the 8h TWA, see section 8.1. Therefore, classification for toxicity upon prolonged exposure is not required.

#### 11.1.10 Aspiration hazard

Calcium oxide is not known to present an aspiration hazard.

### 11.2 Information on other hazards

This substance does not have endocrine disrupting properties with respect to humans.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

#### 12.1.1 Acute/Prolonged toxicity to fish

$LC_{50}$ (96h) for freshwater fish: 50.6 mg/L [determined for $Ca(OH)_2$].

$LC_{50}$ (96h) for marine water fish: 457 mg/L [determined for $Ca(OH)_2$].

#### 12.1.2 Acute/Prolonged toxicity to aquatic invertebrates

$EC_{50}$ (48h) for freshwater invertebrates: 49.1 mg/L [determined for $Ca(OH)_2$].

$LC_{50}$ (96h) for marine water invertebrates: 158 mg/L [determined for $Ca(OH)_2$].

#### 12.1.3 Acute/Prolonged toxicity to aquatic plants

$EC_{50}$ (72h) for freshwater algae: 184.57 mg/L [determined for $Ca(OH)_2$].

NOEC (72h) for freshwater algae: 48 mg/L [determined for $Ca(OH)_2$].

#### 12.1.4 Toxicity to micro-organisms e.g. bacteria

At high concentration, through the rise of temperature and pH, calcium oxide is used for disinfection of sewage sludges.

#### 12.1.5 Chronic toxicity to aquatic organisms

NOEC (14d) for marine water invertebrates: 32 mg/L [determined for $Ca(OH)_2$].

#### 12.1.6 Toxicity to soil dwelling organisms

$EC_{10}/LC_{10}$ or NOEC for soil macroorganisms: 2 000 mg/kg soil dry weight [determined for $Ca(OH)_2$].

$EC_{10}/LC_{10}$ or NOEC for soil microorganisms: 12 000 mg/kg soil dry weight [determined for $Ca(OH)_2$].

#### 12.1.7 Toxicity to terrestrial plants

NOEC (21d) for terrestrial plants: 1 080 mg/kg [determined for $Ca(OH)_2$].

#### 12.1.8 General effect

Acute pH-effect. Although this product is useful to correct water acidity, an excess of more than 1 g/L may be harmful to aquatic life. pH-value of > 12 will rapidly decrease as a result of dilution and carbonation.

#### 12.1.9 Other information

The results of the read-across assessment also apply to calcium oxide, as calcium hydroxide is formed when it comes into contact with water.

### 12.2. Persistence and degradability

Not relevant for inorganic substances.

### 12.3 Bioaccumulative potential

Not relevant for inorganic substances.

### 12.4 Mobility in soil

Calcium oxide reacts with water and/or carbon dioxide to form calcium hydroxide or calcium carbonate, which are poorly soluble in water and not very mobile in most soils.

### 12.5 Results of PBT and vPvB assessment

Not relevant for inorganic substances.

### 12.6 Endocrine disrupting properties

The substance does not disrupt the endocrine system.

### 12.7 Other adverse effects

No other adverse effects are identified.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Disposal of calcium oxide should be in accordance with local and national legislation. Processing, use or contamination of this product may change the waste management options. Consult the appropriate local waste disposal expert about waste disposal. Waste should not be disposed of by release to sewers.
Waste catalogue number: 10 13 04 (wastes from calcination and hydration of lime).

After usage, empty the packing completely. Packaging should not be reused for other purposes. Handle contaminated packages in the same way as the substance itself. Dispose of container and unused contents in accordance with local and national legislation.
Waste catalogue number: 15 01 05 (composite packaging).

## SECTION 14: TRANSPORT INFORMATION

The product is transported to its destination by land (road and rail). For packaged products on pallets, stack a maximum of 2 pallets on top of each other. Transport in closed containers that are upright and securely fastened. Ensure that persons transporting the product are familiar with the procedures to follow in case of emergency, accident, or leakage. Do not transport together with food and feed.

| | MDG/IMO | ICAO/IATA | ADR/RID |
|---|---|---|---|
| 14.1 UN number or ID number | UN 1910 | UN 1910 | UN 1910 |
| 14.2 UN proper shipping name | CALCIUM OXIDE | CALCIUM OXIDE | CALCIUM OXIDE |
| 14.3 Transport hazard class(es) | 8 | - | 8 |
| 14.4 Packing group | - | III. | - |
| 14.5 Environmental hazards | None. | | |
| 14.6 Special precautions for user | Prevent dust during transport by using airtight tanks for powdered products and covered freight cars/trucks for granular/bulk products. | | |
| 14.7 Maritime transport in bulk according to IMO instruments* | Not regulated. | | |

* according to Annex II for treaty MARPOL 73/78 and Codex IBC

## SECTION 15: REGULATORY INFORMATION

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

Authorisations: Not required

Restrictions on use: None

Other EU regulations: Calcium oxide is not a SEVESO substance, not an ozone depleting substance and not a persistent organic pollutant.

National regulations:

Zákon č. 350/2011 Sb., o chemických látkách a chemických směsích a o změně některých zákonů (chemický zákon) vč. prováděcích předpisů v platném znění.

Zákon č. 258/2000 Sb., o ochraně veřejného zdraví a o změně některých souvisejících zákonů, ve znění pozdějších předpisů

Zákon č. 262/2006 Sb., zákoník práce, ve znění pozdějších předpisů

Zákon č. 201/2012 Sb., o ochraně ovzduší v platném znění.

Vyhláška č. 415/2012 Sb., o přípustné úrovni znečišťování a jejím zjišťování a o provedení některých dalších ustanovení zákona o ochraně ovzduší v platném znění.

Zákon č. 254/2001 Sb., o vodách a o změně některých zákonů (vodní zákon), ve znění pozdějších předpisů

Zákon č. 185/2001 Sb., o odpadech a změně některých dalších zákonů (zákon o odpadech), ve znění pozdějších předpisů včetně prováděcích předpisů.

Zákon č. 477/2001 Sb., o obalech a o změně některých zákonů (zákon o obalech), ve znění pozdějších předpisů

Vyhláška č. 381/2001 Sb., kterou se stanoví Katalog odpadů, Seznam nebezpečných odpadů a seznamy odpadu a států pro účely vývozu, dovozu a tranzitu odpadů a postup při udělování souhlasu k vývozu, dovozu a tranzitu odpadů (Katalog odpadů), ve znění pozdějších předpisů

Nařízení vlády ČR č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví zaměstnanců při práci, ve znění pozdějších předpisů

Vyhláška č. 432/2003 Sb., kterou se stanoví podmínky pro zařazování prací do kategorií, limitní hodnoty ukazatelů biologických expozičních testů, podmínky odběru biologického materiálu pro provádění biologických expozičních testů a náležitosti hlášení prací s azbestem a biologickými činiteli v platném znění.

Water endangering class 1 (Germany)

### 15.2 Chemical safety assessment

A chemical safety assessment has been carried out for this substance.

## SECTION 16: OTHER INFORMATION

### 16.1 Classification according to Regulation (EC) No 1272/2008 (CLP)

| | |
|---|---|
| STOT SE 3 | Specific target organ toxicity — single exposure (category 3) |
| Skin Irrit. 2 | Skin corrosion/irritation (category 2) |
| Eye Dam.1 | Serious eye damage/eye irritation (category 1) |

### 16.2 Abbreviations

| | |
|---|---|
| ADR | The European Agreement Concerning the International Carriage of Dangerous Goods by Road |
| CAS | Chemical abstract services |
| CLP | Directive 1272/2008/EC (Classification, Labelling and Packaging) |
| $EC_{10}$ | 10 % effective concentration |
| $EC_{50}$ | median effective concentration |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| IATA | International Air Transport Association |
| ICAO | International Civil Aviation Organization |
| ICSC | International Chemical Safety Card |
| IMDG | International Maritime Dangerous Goods |
| IMO | International Maritime Organization |
| $LC_{10}$ | 10 % lethal concentration |
| $LC_{50}$ | median lethal concentration |
| $LD_{50}$ | median lethal dose |
| NOEC | No Observed Effect Concentration |
| OEL | occupational exposure limit |
| PBT | persistent, bioaccumulative, toxic chemical |
| PNEC | predicted no-effect concentration |
| RID | Regulation concerning the International Carriage of Dangerous Goods by Rail |
| SCF | Scientific Committee on Food |
| SCOEL | Scientific Committee on Occupational Exposure Limits |
| SDS | safety data sheet |
| STEL | short-term exposure limit |
| TWA | time weighted average |
| UN | United Nations |
| vPvB | very persistent, very bioaccumulative chemical |

## 16.3 Key literature references

Anonymous, 2006: Tolerable upper intake levels for vitamins and minerals Scientific Committee on Food, European Food Safety Authority, ISBN: 92-9199-014-0 [SCF document]

Anonymous, 2008: Recommendation from the Scientific Committee on Occupational Exposure Limits (SCOEL) for calcium oxide (CaO) and calcium dihydroxide (Ca(OH)2), European Commission, DG Employment, Social Affairs and Equal Opportunities, SCOEL/SUM/137 February 2008

## 16.4 Revision

General revision – improved clarity and specificity of the text.

Update header.

Specific revision – changes made to the following sections, so the SDS fulfils the requirements set out in the Annex II of regulation (EC) No 1907/2006 (REACH):

| | |
|---|---|
| 1.1 | REACH registration number written in full. |
| 1.2 | Added details. |
| 1.3 | Email contact updated. |
| 1.4 | Updated emergency number, relevant for the specific country. |
| 3.1 | Updated concentration of the main constituent. |
| 4.1 | More detailed description. |
| 4.2 | Detailed description of symptoms for each vector of contact. |
| 5.1 | More detailed description. |
| 5.2 | Special hazards added. |
| 8.1 | Legal basis to the exposure limits added. |
| 8.2.2.2 | Detailed specification for glove material with breakthrough times. |
| 11.2 | Information added. |
| 13.1 | Waste catalogue numbers added. |
| 15.1 | National regulations expanded. |

*Disclaimer*

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation (EC 1907/2006; article 31 and Annex II. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions.

**ANNEX**

***Exposure scenarios***

End of the Safety Data Sheet