

SAFETY DATA SHEET**CHEMICAL SUBSTANCE / MIXTURE
REGULATION (EC) No1907/2006 AS AMENDED BY REGULATION (EU) No 453/2010****SECTION 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY****1.1. Product identifiers**

Product names **Calcium Hydroxide**
Chemical name Calcium hydroxide, Cal (OH)₂
Identified uses Chemical analytics, biochemistry

1.2. Details of the supplier of the safety data sheet

Company JSC "Medicinos linija"
Address Karaliaučiaus str. 29
LT-78374 Šiauliai, Lithuania
Telephone +370 41 553 553
Fax +370 41 553 551
E-mail address dental@i-dental.lt

1.3. Emergency telephone number

Emergency telephone number +370 41 553 553
(Available only during office hours)

SECTION 2: HAZARDS IDENTIFICATION**2.1. Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**

Eye Dam.1

2.1.1. Label elements**Pictograms****Signal word** **Danger****Hazard statement**

H318: Causes serious eye damage.

Precaution statement (prevention)

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

Precaution statement (response)

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 or doctor/physician.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**3.1. Components of the mixture:**

<i>Chemical formula</i>	<i>CAS No</i>	<i>EC No</i>	<i>Index No</i>	<i>Hazard statement</i>	<i>Contents, %</i>
Calcium hydroxide	1305-62-0	215-137-3	-	H318	100

SECTION 4: FIRST AID MEASURES**4.1. General advice**

Immediate medical attention is not required if the level of exposure is not large. In doubt, consult a physician. Show this safety data sheet to the doctor in attendance.

4.2. If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Get medical attention immediately.

4.3. In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing if eye irritation persists, eye pain, experience other negative symptoms – get medical attention immediately.

4.4. Ingestion

Never give anything by mouth to an unconscious person. If person is conscious - drink plenty of water. DO NOT induce vomiting. Get medical attention immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

4.5. In case of skin contact

Wash off with soap and plenty of cold water. Get medical attention.

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

Very hazardous in case of eye contact (irritant). Hazardous in case of skin contact (irritant), of eye contact (corrosive), of ingestion, of inhalation. Corrosive to eyes and skin. The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe overexposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

No data available.

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

Use water, water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Advice for fire fighters

Standard procedure for chemical fires.

5.3. Special Remarks on Fire Hazards

Alkaline hydroxides boiled with phosphorus yields mixed phosphines which may ignite spontaneously in air.

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and materials for containment and cleaning up

Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Corrosive solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapours. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and allow evacuating through the sanitary system.

6.4. Reference to other sections

For disposal see section 13.

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

Avoid contact with eyes. Use personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids. Decomposes on heating. This produces calcium oxide. The solution in water is a medium strong base. Reacts violently with acids. Attacks many metals in the presence of water.

7.3. Specific end uses

Chemical analytics, biochemistry.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1. Exposure limit values**

TWA: 5 (mg/m³) from ACGIH (TLV) [United States] TWA: 5 (mg/m³) [Canada] TWA: 5 (mg/m³) from NIOSH. Consult local authorities for acceptable exposure limits.

8.2. Exposure controls

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

8.3. Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.4. Personal protective equipment**8.4.1. Eye/face protection**

Wear eye / face protection Equipment. Safety glasses with side-shields, conforming to EN 166.

8.4.2. Hand protection

Handle with gloves.

8.4.3. Skin protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

8.4.4. Respiratory protection

Dust respirator. Be sure to use an approved/certified respirator or equivalent.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. General information**

Appearance	Solid powder
Colour	White
Odour	Odourless

9.2. Important health, safety and environment information (anhydrous substance)

pH	14 lit.
Melting point/range	580 °C - lit.
Initial boiling point and boiling range	no data available
Flash point	no data available
Evaporation rate	no data available
Flammability (solid, gas)	no data available
Vapour pressure	not applicable
Vapour density	no data available
Relative density	no data available
Water solubility	insoluble

SECTION 10: STABILITY AND REACTIVITY**10.1. Stability**

Stable.

10.2. Conditions to avoid

Incompatible materials, air.

10.3. Materials to avoid

Reactive with acids

Incompatible with maleic anhydride, phosphorous, nitroethane, nitromethane, nitorparaffins, nitropropane, polychlorinated phenols, potassium nitrate. When chlorinated phenols are heated for analytical purposes with calcium hydroxide-potassium nitrate mixtures, chlorinated benzodioxins analagous to extremely toxic tetrachlorodibenzodioxin may be formed. Readily absorbs CO₂ from air forming calcium carbonate.

10.4. Hazard decomposition products

Other decomposition products - no data available

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Possible dangerous to health effects**

No data available.

11.2. Signs and Symptoms of Exposure

No data available.

11.3. Toxicity

Acute oral toxicity (LD50): 7300 mg/kg [Mouse].

11.3.1. Other Toxic Effects on Humans:

Extremely hazardous in case of eye contact (irritant). Hazardous in case of skin contact (irritant), of eye contact (corrosive), of ingestion, inhalation. Slightly hazardous in case of skin contact (corrosive, permeator).

Acute Potential Health Effects:

Skin: Causes skin irritation. Alkalies penetrate skin slowly. The extent of damage depends on the duration of contact.

Eyes: Causes severe irritation of the eyes. Can cause "Lime Burns" of the eye. Clumps may lodge deep in the recesses of the eye, releasing calcium hydroxide over a long period of time. Severe burns of the cornea with possible damage to corneal nerves can occur.

Ingestion: Causes gastrointestinal tract irritation with vomiting, diarrhea, severe pain. Vomitus may contain blood and desquamated mucosal lining. May cause delayed gastrointestinal burns and perforation (gastric or esophageal) with severe abdominal pain and rapid fall in blood pressure.

Inhalation: Causes severe irritation of the respiratory tract (nose, throat, lungs), and mucous membranes with coughing, wheezing and/or shortness of breath. Material is destructive to tissue of the mucous membranes and upper respiratory tract.

Chronic Potential Health Effects: Prolonged or repeated skin contact may produce severe irritation or dermatitis.

11.4. Carcinogenicity

IARC: No confirmed as human carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Ecotoxicity	No data available
12.2. Mobility	No data available
12.3. Persistence and degradability	No data available
12.4. Bio accumulative potential	No data available
12.5. Results of PBT and vPvB assessment	No data available
12.6. Other adverse effects	No data available

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Offer waste to a licensed disposal company. Contaminated packaging Dispose of as unused product. Do not remove the information from package. Manage waste as required by regulatory requirements.

SECTION 14: TRANSPORT INFORMATION

14.1. Not dangerous goods.

SECTION 15: REGULATORY INFORMATION

15.1. This safety datasheet complies with the requirements of Regulation (EC) No 1907/2006 as amended by Regulation (EU) No 453/2010.

15.2. Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

15.3. This safety data sheet information is not a professional risk assessment.

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

No data available.

15.5. Chemical Safety Assessment

No data available.

15.6. Health, safety and environmental information

Not hazardous material.

SECTION 16: OTHER INFORMATION

16.1. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

16.2. UAB „Medicinos linija“ shall not be held liable for any damage resulting from handling or from contact with the above product.

16.3. The product should not be used for purposes other than specified in p.7.4 purposes.

16.4. User is responsible for the legal, regulatory compliance.

16.5. Abbreviations and acronyms used in the safety data sheet:

16.5.1. EC – European Commission

16.5.2. EEC – European Economic Community

16.5.3. EU – European Union

16.5.4. GHS – Globally Harmonized System

16.5.5. CLP – Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

16.5.6. CAS No – Chemical Abstracts Service number

16.5.7. EC No – EINECS and ELINCS Number (see also EINECS and ELINCS)

16.5.8. EINECS – European Inventory of Existing Commercial Substances

16.5.9. ELINCS – European List of notified Chemical Substances

16.5.10. EN – European Standard

16.5.11. NIOSH - National Institute for Occupational Safety and Health

16.5.12. IARC – International Agency for Research on Cancer

16.5.13. PBT - Persistent, Bio accumulative and toxic substance

16.5.14. VPvB – Very Persistent and Very Bio accumulative

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

16.5.16. RID – Regulations concerning the International Carriage of Dangerous Goods by Rail

16.5.17. UN – United Nations

16.5.18. IMDG – International Maritime Dangerous Goods

16.5.19. ICAO-TI – Technical Instructions for the Safe Transport of Dangerous Goods by Air

16.5.20. IATA-DGR – International Air Transport Association Dangerous Goods Regulations

16.5.21. LC50 – Lethal Concentration to 50 % of a test population

16.5.22. LD50 – Lethal Dose to 50% of a test population (Median Lethal Dose)

16.6. Key literature references and sources for data: <http://echa.europa.eu>.

16.7. List of relevant hazard statements, safety phrases and/or precautionary statements full text:

Signal word: Danger.

H318: Causes serious eye damage.

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

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 or doctor/physician.

16.8. Training advice: How to properly handle chemical substances / preparations employees must be trained in accordance with national requirements