1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE COMPANY OR UNDERTAKING

1.1. Product identifier:

Mixture name: **KALK**

Other means of identification: ***types of fertilizer, names*:**
"KALK V"; "KALK HUM" ("Kalk Hum 0.4%")
Granular limestone for lawns, gardens

1.2. Identified uses and non-recommended uses of the mixture:

1.2.1 Designated uses:

Fertilizers (fertilizer products) - liming agents used to maintain or reduce soil fertilization, improve plant nutrition, and change the physical properties of soil. The elemental composition, exact purpose, and method of use of the fertilizer shall be indicated on the label or in the technical description. Available granule fractions (individually packaged): 0,01-2 mm; 2-5 mm; 2-6 mm and 5-8 mm.

1.2.2 Not recommended uses.

No other uses are foreseen.

1.3. Details of the supplier of the safety data sheet:

Manufacturer:	**UAB "MORTAR AKMENE"**
Address:	**Statybininku st. 69, Venta, LT-85305 Akmene district.**
Phone:	**00370-687-46506, Fax: 00370-425-40025**
email:	**info@mortarakmene.lt ,**
Web:	**www.mortarakmene.lt**

E-mail of the competent person responsible for filling out the SDS email address: info@mortarakmene.lt

1.4. Helpline number:

Lithuanian Poison Control and Information Office
Šiltnamių st. 29, LT-2043 Vilnius, Lithuania
phone: 00370 5 236 20 52, mobile: 00370 687 53378

2. POTENTIAL HAZARDS

2.1. Mixture classification:

Classification according to CLP Regulation No 1272/2008/EC	
Hazard classes and categories, codes for hazard statements (risk phrases)	Codes for additional hazard information
Not applicable - mixture not classified as dangerous	Not applicable

2.2. Marking elements

Information on hazardous components: **Not applicable.**

Signaling word **Not applicable.**

Hazard symbols: **Not applicable.**

Hazard statements: **Not applicable.**

Additional hazard information: **Not applicable.**

Precautionary statements: **Not applicable.**

RECOMMENDED PRECAUTIONARY STATEMENTS FOR A PRODUCT SUPPLIED TO THE GENERAL PUBLIC:

P102 **Keep away from children.**

P261 **Do not inhale dust.**

2.3. Other hazards

PBT or vPvB criteria: not applicable - contains only inorganic substances. Kalk Hum contains up to 0,4 % humic and fulvic acids which do not meet the classification criteria.

Hazards related to ignition or explosion: Kalk are non-flammable and non-explosive.

3. COMPOSITION OR INFORMATION ON INGREDIENTS

3.1. Materials

EC No.	*CAS No.*	*Chemical name*	*Concentration, % by weight*	*Classification according to CLP Regulation No 1272/2008/EC*
215-279-6	1317-65-3	Limestone	Up to 100; (for calcium carbonate ≥ 95)	Substance not classified as hazardous

Notes: does not contain impurities or additives - hazardous substances required to be declared in the Safety Data Sheet in concentrations above those specified in Article 3.2 of Regulation 2020/878/EU.

REACH Registration No. - not applicable in accordance with the provisions of p.8 of Annex V of Regulation 1907/2006/EC (REACH) - naturally occurring, not chemically modified, and not meeting the criteria to be classified as a hazardous chemical.

4. FIRST AID MEASURES

4.1. Description of first aid measures

GENERAL INFORMATION: seek immediate medical attention whenever in doubt or when signs of ill health appear. If the victim loses consciousness, do not give anything to drink or put anything in the mouth. If poisoning is suspected or detected, contact a doctor or the Poisons Information Bureau immediately on 00370 5 236 20 52.

METHOD OF ENTRY OF CHEMICAL SUBSTANCE, PREPARATION INTO THE BODY:

AFTER INHALATION OF DUS**T: get out in clean air, calm, deep breathing. Rinse your mouth and if you feel like it, if possible, the nose with clean water. In case of respiratory problems, call a doctor immediately.**

IN CASE OF CONTACT WITH SKIN: **wash skin with soap and water, wipe, remove contaminated clothing. If irritation is felt, seek medical attention.**

IN CASE OF CONTACT WITH EYES**: wash gently with lukewarm water for a few minutes as soon as possible. Remove contact lenses if they are present and can be easily removed. Continue to wash the eyes with the eyelids raised. or by gently raising and lowering them with running water. Do not rinse with a strong jet of water to avoid mechanical damage to the cornea. If the irritation persists, seek medical advice.**

IF SWALLOWED**: rinse mouth with water followed by plenty of water and activated charcoal. Do not induce vomiting. If symptoms of poisoning persist - seek medical advice.**

4.2. Most important symptoms and effects (acute and delayed): lime fertilizers are not classified as dangerous. Aqueous solutions (suspensions) have alkaline properties. Inhalation of dust may cause irritation of the respiratory tract, coughing. If it gets into the eyes, it can cause irritation, pain, lacrimation, and can cause damage to the cornea. The eyes can be especially damaged when the eyes are closed. Mechanical damage to the eyes is possible. In contact with the skin - excessive amounts may cause skin irritation. Prolonged or repeated exposure may cause non-allergic dermatitis. After swallowing a large amount - it irritates the esophagus, abdominal pain, vomiting, diarrhea may occur. Large doses can cause inflammation of the stomach and small intestine, shock, and possible heart problems due to excessive potassium.

4.3. Indication of any immediate medical attention and special treatment needed: no specific antidotes, symptomatic treatment is applied.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media: limestone is non-flammable, fire extinguishing agents are selected according to other fires properties of burning materials.

5.2. Special hazards arising from the substance or mixture: small amounts of sulfur oxides are expected during thermal decomposition.

5.3. Advice for firefighters: protective measures must be selected according to the properties of other combustible materials. Extinguishing agents must not enter sewers or open bodies of water.

6. ACCIDENT LIQUIDATION MEASURES

6.1. Personal precautions, protective equipment, and emergency procedures: In the event of fertilizer spillage, ensure sufficient ventilation of the premises. Persons who are not involved in the liquidation of the accident must leave. Avoid dust, contact with eyes, face, skin, and clothes. Use protective equipment. Carefully, avoiding dust and further disintegration, place damaged containers in suitable sealed containers - containers, plastic bags.

6.2. Environmental Precautions: Depending on the nature and degree of pollution, it is possible to dispose of the spilled product by using it directly for fertilization or to remove it as waste by submitting it to a designated waste collection point. Avoid getting the product into sewers and watercourses.

6.3. Isolation and cleaning procedures and measures: Sweep or scoop up, avoiding dust (Section 13), and pour into sealed bags, plastic, or metal containers. Places where the product was spilled, clean with a damp cloth or rinse with water. Collected fertilizer can be used as intended.

6.4. Link to other sections: Suitable personal protective measures are specified in section 8 "Exposure prevention (personal protection)", Waste management - see Section 13.

7. USE AND STORAGE

7.1. Precautions for safe handling: avoid dusting, skin contact, clothing, especially to avoid contact with the face and eyes. Especially be careful of dust when working with granules of 0.01 - 2 mm fraction. Do not crush the granules. Do not eat, drink, or smoke in workplaces. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities: fertilizers are hygroscopic, absorbs moisture from the air as. Store in tightly closed plastic containers or bags in a dry room. Protect packages from mechanical damage. Unsuitable (incompatible) chemical substances to be stored together: none. Packaging requirements - plastic containers, bags or large bags with polyethylene or polypropylene film inserts, laminated bags, steel containers.

7.3. Specific end use(s): purpose is specified in section 1. Set up methods of use are given in the technical descriptions.

8. EXPOSURE PREVENTION/PERSONAL PROTECTION

8.1. Control parameters: limit values for chemicals in the chemical mixture in ambient air - HN 23:2011 (2018, 2019 and 2021 amendments) - no data available for calcium carbonate

Chemical substance		*Limit size*						*Impact health features markers/ notes*
		Long-term exposure limit size (IPRD)		*Short term exposure limit size (TPRD)*		*Unexceeded limit size (NDR)*		
Name	*CAS*	*mg/m³*	*ppm*	*mg/m3*	*ppm*	*mg/m³*	*ppm*	
Dust:								
- inspiratory fraction		**10**	**-**	**-**	**-**	**-**	**-**	*****
- alveolar fraction		**5**	**-**	**-**	**-**	**-**	**-**	*****

8.2. Exposure control

8.2.1. **Relevant technical management measures**: good storage and ventilation of working premises, general and local ventilation, avoid spillage and product dusting.

8.2.2. **Personal protective equipment**

RESPIRATORY PROTECTIVE EQUIPMENT: Do not inhale dust. Using as intended respirators are used as protective equipment. In case of accidents, spills, use half-masks with a filter - P1 according to EN 143, - filtering half-masks (respirators) against non-toxic dust type FFP1 according to EN 149 must be used to protect against dust.

HAND AND SKIN PROTECTION: Protective waterproof gloves (EN374).

EYE PROTECTION: If there is a possibility of getting into the eyes – use safety glasses EN 166).

OTHER SKIN PROTECTION EQUIPMENT (WORK CLOTHES, FOOTWEAR, ETC.): Covering the entire foot footwear, work clothes.

PERSONAL HYGIENE MEASURES: Do not eat, do not smoke, do not drink at the workplace. Periodically change work clothes. Wash your hands before eating. After finishing work, take a shower, change clothes.

8.2.3. **Environmental impact control**: do not pour into the sewer, do not pour large quantities on one place soil.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

a) Appearance (aggregate state, color):	**Solid granules**
b) Color	**Brownish**
c) Scent:	**Odorless**
d) Melting and solidification points:	**calcium carbonate - ≥ 825 °C - decomposes**
c) Boiling point:	**Not applicable - calcium carbonate decomposes before boiling**
d) Flammability	**Not applicable**
g) Upper and lower explosive limits:	**Not applicable**
h) Flash point:	**Not applicable**
i) Auto-ignition temperature:	**Not applicable**
j) Temperature of decomposition:	**> 800 °C - calcium carbonate**
k) pH:	**~ 9 - 10,5 (10 % aqueous suspension)**
m) Solubility in water:	**Calcium carbonate is almost insoluble in water (16.6 mg/l at 20 °C). Limestone is soluble by reacting in acid solutions.**
n) Partition coefficient n-octanol/water:	**Not applicable to inorganic substances**
o) Vapor pressure:	**Not applicable**
p) Density and/or relative density:	**Not regulated**
q) Relative vapour density:	**Not applicable**
r) Particle properties:	**Granule fractions: 0,01-2 mm; 2-5 mm; 2-6 mm and 5-8 mm.**

9.2. Other information: none

10. STABILITY AND REACTIVITY

10.1. Reactivity: reacts with acids.

10.2. Chemical stability: the product is stable and non-degradable under the specified storage conditions.

10.3. Possibility of dangerous reactions: when stored and used correctly, there is no real difference.

10.4. Conditions to avoid: air humidity - fertilizers are hygroscopic. absorbs moisture from the air.

10.5. Incompatible materials: strong or volatile acids.

10.6. Hazardous decomposition products: see 5.2.

11. TOXICOLOGICAL INFORMATION

a) ACUTE TOXICITY: Based on the available data, the components do not meet the classification criteria as 'harmful'.

b) SKIN CORROSION AND/OR IRRITATION: Based on the available data, the components do not meet the classification criteria, slight irritation is possible.

c) SERIOUS EYE DAMAGE AND/OR EYE IRRITATION: causes moderate irritation, danger possible mechanical damage to the eyes.

d) RESPIRATORY OR SKIN SENSITIZATION: Does not meet the classification criteria.

e) MUTAGENIC EFFECT ON GERM CELLS; CARCINOGENICITY; REPRODUCTIVE TOXICITY: Based on the available data does not meet the classification criteria.

f) CARCINOGENICITY: Based on the available data does not meet the classification criteria.

g) REPRODUCTIVE TOXICITY: Based on the available data does not meet the classification criteria.

h) STOT: The components of the mixture are not classified as those that pose a risk only to a specific organ.

i) ASPIRATION HAZARD: Does not apply.

11.2 Information on other hazards: no other relevant information.

12. ECOLOGICAL INFORMATION

12.1. Toxicity: The ecotoxicity of fertilizer components is low. If large quantities enter water, it may cause a short-term local increase in water pH. When it gets on the soil, it causes an increase in alkalinity, if the soil is acidic, it reduces the acidity.

12.2. Durability and degradability: Calcium and magnesium dihydroxides do not dissolve in water, they settle on bottom, are neutralized by acids, forming the corresponding salts. Soluble components dissociate into ions, disperse.

12.3. Bioaccumulate potential: Does not apply.

12.4. Mobility in soil: Calcium and magnesium ions form insoluble compounds - carbonates, sulfates that naturally exist in the soil.

12.5. Endocrine disruptive properties: based on the available data, the components are not harmful to the endocrine system.

12.6. Results of PBT and vPvB assessment: Does not apply - inorganic materials.

12.7. Other unwanted effects: No data available.

13. WASTE MANAGEMENT

13.1. Waste management methods: No special requirements apply. Collected waste is possible use as intended as a fertilizer. Large quantities of waste are disposed of according to local requirements. Waste codes: 10 13 - waste of cement, lime and gypsum and articles and products made from them; 10 13 04 - lime calcination and hydration waste, 06 13 99 -

waste from inorganic chemical processes not otherwise specified. Codes of properties determining the danger - none. Empty packaging can be reused or recycled.

14. TRANSPORT INFORMATION

14.1 UN number or ID number: Does not apply.

14.2 UN proper shipping name: Does not apply.

14.3. Transport hazard class(es): Does not apply.

14.4. Package Group: does not apply.

14.5. Environmental hazard: does not apply.

14.6. Special precautions for users: During transportation, packages must be stacked in such a way as to avoid the risk of mechanical damage.

14.7. Transport in bulk according to MARPOL 73/78 Annex II and the IBC Code: Does not apply.

15. REGULATORY INFORMATION

15.1. Safety, health, and environmental legislation relevant to the specific substance or mixture

- REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93, Commission Regulation (EC) No 1488/94, Council Directive 76/769/EEC, and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC, and 2000/21/EC.
- Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of chemicals and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
- European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).
- 18 December 2014. Commission Regulation (EU) No 1357/2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives.
- HN 23:2011 "Occupational exposure limit values for chemicals. General requirements for measurement and exposure assessment" (Approved by Order No V-824/A1-389 of the Minister of Health of the Republic of Lithuania and of the Minister of Social Security and Labor of 1 September 2011, Mag, 2011, No 112-5274), as amended by Order No V-695/A1-272 of 12 June 2018 of the Minister of Health and the Minister of Social Security and Labor of the Republic of Lithuania, TAR, 15 June 2018, No 9988; Order No V-1203/A1-646 of 24 October 2019 of the Minister of Health and the Minister of Social Security and Labor of the Republic of Lithuania, TAR, 29-10-2019, No 17148; and Order No V-13/A1-12 of 6 January 2021 of the Minister of Social Security and Labor of the Republic of Lithuania, TAR, 6.01.2021, No 184.
- Packaging and Packaging Waste Management Rules, new wording (approved by Order of the Minister of the Environment of the Republic of Lithuania No. D1-225 of 31 March 2016, TAR, 2016-04-01, No. 2016-06779 with subsequent amendments).

- Waste Management Rules (new wording approved by Order No D1-831 of the Minister of the Environment of the Republic of Lithuania of 9 October 2017, TAR, 11-10-2017, Company code 2017-16089, amended by TAR, 02-01-2018, No 57, Company code 2018-00057).
- Regulations on Provision of Personal Protective Equipment to Employees (approved by Order of the Minister of Social Security and Labor of the Republic of Lithuania No. A1-331 of 26 November 2007, Journal of Laws, 2007, No. 123-5055), amendment approved by Order of the Minister of Social Security and Labor of the Republic of Lithuania No. A1-170 of 19 April 2018 (TAR, 20 April 2018, no. 2018-06281).
- Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 on fertilizers.

15.2. Chemical safety assessment: does not apply to mixtures, the mixture is not classified as dangerous.

16. OTHER INFORMATION

EXPLANATIONS OF HAZARD SYMBOLS, PICTOGRAMS, RISK PHRASES, HAZARD CLASSES AND OTHER SIGNS NOT SPECIFIED IN SECTION 2 AND 3: None.

This safety data sheet has been revised (version 4) considering the new requirements for safety data sheets specified in regulation no. 453/2010/EC and evaluating the new classification and labeling of chemicals according to the CLP/GHS regulation no. 1272/2008/EC. When reviewing the safety data sheet, all its sections were clarified or supplemented, information on a new type of fertilizer - "Kalk HUM 0.5%" was added.

In the 4th version, the text was revised, clarified and 1.2. was clarified; Subsections 3.2 and 9.2 regarding mixture chemical composition and particle size fractions.

The data presented in this safety data sheet must be available to anyone whose work involves the mixture. The data are consistent with our current knowledge and are intended to describe the chemical product in terms of occupational safety and health, environmental protection. The information on the safety data sheet will be supplemented when new data on the chemical effects of the mixture on health and the environment, on preventive measures to reduce or completely avoid hazards, become available. The safety data sheet will be updated as new data becomes available.

UAB "Mortar Akmenė" hopes that the information provided will ensure the safe use of these mixtures.

End of safety data sheet

The data contained in this Safety Data Sheet must be made available to everyone whose work involves the chemical substance or mixture. The data are to the best of our knowledge and are intended to describe the chemical product in terms of occupational health and safety and environmental aspects. The information in the safety data sheet will be supplemented as new data become available on the health and environmental effects of the chemical and on preventive measures to minimise or avoid hazards. The information provided in the safety data sheet shall not reveal other specific properties of the substance or mixture.