

## SAFETY DATA SHEED

### Calcium Nitrate Horticultural Grade

Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (KKDIK) dated 23.06.2017 and numbered 30105.

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

##### 1.1. Product identifier

Product name Calcium Nitrate Horticultural Grade  
REACH registration number No information

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

Identified uses Nitrogen-calcium fertilizer for a regenerative fertilization of winter crops and in particular for additional fertilization during the vegetation time

Uses Advised against No specific uses advised against are identified.

##### 1.3. Details of the supplier of the safety datasheet

Supplier Lapischem Kimya San. Ve Tic. A.Ş.  
Soğanlık Yeni Mh. Aliğa sok. No:8 Bumerang Kartal  
K:2 D:4 KARTAL/İSTANBUL  
34880 İstanbul - Türkiye  
+ 90 216 599 07 53  
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[info@lapischem.com](mailto:info@lapischem.com) [www.lapischem.com](http://www.lapischem.com)

##### 1.4. Emergency telephone number

National emergency telephone number Health service 112  
UZEM 114

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified  
Health hazards Acut Tox 4- H302, Eye Dam 1- H318  
Environmental hazards Not Classified

##### 2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements H302 Harmful if swallowed.  
H318 Causes serious eye damage

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Precautionary statements	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.
Contains	Calcium Nitrate

#### 2.3. Other hazards

Depending on concentration, the dust from the granulated fertilizer irritates the skin, air passages and eyes.

The irritating effect is increased by the influence of humidity or due to sweating.

The product has an adverse impact on the oxygen balance in waters

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

CALCIUM NITRATE	70-85%
CAS NO: 10124-37-5	EC NO: 233-332-1
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318	

The full text for all hazard statements is displayed in Section 16.

Ingredient notes      Specific Concentration limits - ammonium nitrate (CAS: 6484-52-2) Eye Irrit. 2: 80 % < C ≤ 100 %

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

General information	Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting unless under the direction of medical personnel. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if symptoms are severe or persist.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse. Get medical attention
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

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

General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Depending on concentration, the dust from the granulated fertilizer irritates the skin, air passages and eyes. The irritating effect is increased by the influence of humidity or due to sweating. The product has an adverse impact on the oxygen balance in waters.
Inhalation	No specific symptoms known.
Ingestion	May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.
Skin contact	Prolonged contact may cause dryness of the skin. May cause irritation.
Eye contact	Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Redness

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

For the doctor	Treat symptomatically.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire
Unsuitable extinguishing media	Extinguishing powders. Do not use water jet as an extinguisher, as this will spread the fire

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

Specific hazards	Non-combustible
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

#### 5.3. Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

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#### SECTION 6: Accidental release measures

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

**Personal precautions** No action shall be taken without appropriate training or involving any personal risk. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Avoid inhalation of dust. Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Do not eat, drink or smoke when using this product.

##### 6.2. Environmental precautions

**Environmental precautions** Clear up spills immediately and dispose of waste safely. Avoid discharge into drains or watercourses or onto the ground.

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

**Methods for cleaning up** Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Provide adequate ventilation. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Liquidation in a dry way, for the disposal, we recommend to utilize composting plants

##### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

#### SECTION 7: Handling and storage

##### 7.1. Precautions for safe handling

**Usage precautions** Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Container must be kept tightly closed when not in use. Do not handle broken packages without protective equipment. Do not reuse empty containers. Take care as floors and other surfaces may become slippery.

**Advice on general occupational hygiene** Wash promptly if skin becomes contaminated. Take off contaminated clothing. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

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

**Storage precautions** Store away from incompatible materials (see Section 10). Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. The fertilizer is to be stored in bulk, in piles up to 6m height, distant from each other minimum 2m, or in departments (boxes). The piles and the departments must be signed with the fertilizer name. The storage area floor should be leak-tight, jointless and not absorbent. A packed fertilizer is to be stored in bags, piled one upon the other up to a height of maximum 1,5m or upon pallets up to a height of maximum 3,5m. It must be protected from a direct solar radiation and a radiant heat, otherwise a destruction of pellets and a hardening of the fertilizer occurs. Protect from moisture. It is recommended to cover the stored fertilizer with PE tarpaulin.

**7.3. Specific end use(s)** The identified uses for this product are detailed in Section 1.2

#### SECTION 8: Exposure controls/Personal protection

##### 8.1. Control parameters

Occupational exposure limits : None

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#### 8.2. Exposure controls

##### Protective equipment



##### Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.

##### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead..

##### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

##### Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

##### Hygiene measures

Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.

##### Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels

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#### SECTION 9: Physical and chemical properties

##### 9.1 Information on basic physical and chemical properties

Appearance	Solid
Colour	White to ochre hygroscopic granules of size between 2 and 5 mm.
Odour	Odourless
Odour threshold	No information available.
pH	pH (diluted solution): 5-7 (10% solution)
Melting point	Not relevant.
Initial boiling point and range	Not relevant.
Flash point	Not relevant.
Evaporation rate	Inconclusive data.
Evaporation factor	Inconclusive data.
Flammability (solid, gas)	Not relevant.
Upper/lower flammability or explosive limits	Not relevant.
Solubility(ies)	Soluble in water.

**9.2. Other information** The fertilizer is strongly hygroscopic.

#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

Reactivity Stable at normal ambient temperatures and when used as recommended.

##### 10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

##### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Reacts with strong alkali and form ammonia.

##### 10.4. Conditions to avoid

Conditions to avoid Do not pressurise, cut, weld, drill, grind or otherwise expose containers to heat or sources of ignition.

##### 10.5. Incompatible materials

Materials to avoid Avoid contact with flammable/combustible materials.

##### 10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours. Nitrogen Oxides (NOx) Ammonia.

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#### SECTION 11: Toxicological information

##### 11.1. Information on toxicological effects

###### Acute toxicity - oral

Notes (oral LD<sub>50</sub>) Acute Tox. 4 - H302 Harmful if swallowed

###### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) Based on available data the classification criteria are not met.

###### Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) Based on available data the classification criteria are not met.

###### Skin corrosion/irritation

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

###### Serious eye damage/irritation

Causes serious eye irritation.

###### Respiratory sensitisation

Based on available data the classification criteria are not met.

###### Skin sensitisation

Based on available data the classification criteria are not met.

###### Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

###### Carcinogenicity

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

###### IARC carcinogenicity

None of the ingredients are listed or exempt.

###### Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

###### Reproductive toxicity - development

Based on available data the classification criteria are not met.

###### Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure

###### Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure

###### Aspiration hazard

Aspiration hazard Not relevant. Solid.

###### General information

The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Depending on concentration, the dust from the granulated fertilizer irritates the skin, air passages and eyes. The irritating effect is increased by the influence of humidity or due to sweating.

###### Inhalation

No specific symptoms known

###### Ingestion

May cause discomfort if swallowed. Stomach pain. Nausea, vomiting

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Skin contact	Prolonged contact may cause dryness of the skin.
Eye contact	Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Redness.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known
Calcium Nitrate	
Acute toxicity – oral	
ATE oral (mg/kg) 500.0	
Ammonium Nitrate	
Acute toxicity – oral	
Notes (oral LD <sub>50</sub> ) LD <sub>50</sub> 2950 mg/kg, Oral, Rat (OECD Test Guideline 401)	
Acute toxicity – dermal	
Notes (dermal LD <sub>50</sub> ) LD <sub>50</sub> >5000 mg/kg, Dermal, Rat (OECD Test Guideline 402)	
Carcinogenicity	
IARC carcinogenicity IARC Group 2A Probably carcinogenic to humans	

#### SECTION 12: Ecological information

Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.
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##### 12.1. Toxicity

Toxicity	Based on available data the classification criteria are not met.
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Ammonium Nitrate

Acute aquatic toxicity

Acute toxicity -	fish LC <sub>50</sub> , 96 hour: 447 mg/l, Cyprinus carpio (Common carp)
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<b>12.2. Persistence and degradability</b>	The degradability of the product is not known.
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##### 12.3. Bio accumulative potential

Bio accumulative potential	No data available on bioaccumulation.
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Ammonium Nitrate

Partition coefficient	No information available
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##### 12.4. Mobility in soil

Mobility	The product soluble in water.
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##### 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria
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#### SECTION 13: Disposal considerations

##### 13.1. Waste treatment methods

General information	The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous
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Disposal methods	Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible
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#### SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

Special provisions: 208 - The commercial grade of calcium nitrate fertilizer, when consisting mainly of a double salt (calcium nitrate and ammonium nitrate) containing not more than 10% ammonium nitrate and at least 12% water of crystallization, is not subject to the requirements of ADR

#### 14.1. UN number

UN No. (ADR/RID)

UN No. (IMDG)

UN No. (ICAO)

UN No. (ADN)

#### 14.2. UN proper shipping name

Proper shipping name (ADR/RID)

Proper shipping name (IMDG)

Proper shipping name (ICAO)

Proper shipping name (ADN)

#### Transport hazard class(es)

ADR/RID class

ADR/RID classification code

ADR/RID label

IMDG class

ICAO class/division

ADN class

Transport labels

#### 14.3. Packing group

ADR/RID packing group

IMDG packing group

ICAO packing group

ADN packing group

#### 14.4. Environmental hazards

Not applicable

#### 14.5. Special precautions for user

No

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EmS	-
ADR transport category	-
Emergency Action Code	-
Hazard Identification Number (ADR/RID)	-
Tunnel restriction code	-

#### 14.6. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable.

Transport in bulk according to  
Annex II of MARPOL 73/78 and the  
IBC Code

#### SECTION 15: Regulatory information

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]
EU legislation	Commission Regulation (EU) No 453/2010 of 20 May 2010. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended)

##### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### SECTION 16: Other information

Classification procedures according to Regulation (EC) 1272/2008	H302 Harmful if swallowed. H318 Causes serious eye damage.
Training advice	Read and follow manufacturer's recommendations. Only trained personnel should use this material.
Issued by	Chemical Assessment Specialist: Bora Şen Effective Date: November 25, 2025 Certificate No & Date: TÜV / 11.49.03 & 2 November 2020 Mail: <a href="mailto:bora@smartchem.com.tr">bora@smartchem.com.tr</a>
Revision date	01/07/2023
SDS number	6001
Hazard statements in full	H302 Harmful if swallowed. H318 Causes serious eye damage.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.