

# SAFETY DATA SHEET

According to Regulation EC No 1907/2006



## CALCIUM NITRATE

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### 1.1. Product identifier

<b>Product name</b>	Calcium Nitrate
<b>Synonyms</b>	Nitric acid ammonium calcium salt
<b>CAS No</b>	15245-12-2
<b>EC No</b>	239-289-5

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

##### 1.2.1. Relevant identified uses of the substance

Industrial use

##### 1.2.2. Uses advised against

No uses specifically advised against.

#### 1.3. Details of the producer

<b>Company name</b>	Makrokim Kimyasal Maddeler Sanayi Ticaret Limited Şirketi
<b>Address</b>	İstanbul Tuzla Deri OSB, 7/A No.11 Yol, P3-1 Parsel Tuzla İstanbul / Turkey
<b>Tel</b>	+90 216 394 17 87
<b>Fax</b>	+90 216 394 17 88
<b>E-mail</b>	info@makrokim.com

#### 1.4. Emergency telephone numbers

**Company Info Desk** +90 216 394 17 87

### 2. HAZARD IDENTIFICATION

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

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS];



Acute Toxicity (Oral) - Category 4; H302

Serious Eye Damage / Eye Irritation - Category 1; H318

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Classification according to 67/548/EEC [DSD] or 1999/45/EC [DPD];



Harmful; R22

Irritant; R41

### 2.2. Label Elements



**Signal word:** Danger

**Hazard statements:**

H302: Harmful if swallowed

H318: Causes serious eye damage

**Precautionary statements:**

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

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

P301 + P312 : IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501: Dispose of contents/container to local regulations.

### 2.3. Other hazards

Result of PBT and vPvB assessment : No data available

### 2.4. Additional information

Please look over section 11 for toxicological information. Full text of R-, H- and EUH-phrases: see section 16.

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substance/Mixture

Name	CAS & EC No	%	Classification DSD	Classification CLP
Calcium Ammonium Nitrate	15245-12-2 239-289-5	100	Xn; R22 Xi; R41	Acute Tox. 4; H302 Eye Damage 1; H318

#### 3.2. Additional information

See Section 16 for the full text of the R phrases or H statements declared above.

### 4. FIRST AID MEASURES

#### 4.1. Description of first aid measures

##### Eye contact

Check for and remove any contact lenses. Rinse out with water with the eyelid held wide open. Get medical attention if irritation persists.

##### Skin contact

Remove contaminated clothing. Immediately flush skin with large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. Get medical attention if irritation persists.

##### Ingestion

Rinse out mouth and make victim drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting unless directed to do so by medical personnel; call for medical help.

##### Inhalation

Remove from exposure. Keep warm and at rest and provide fresh air. Get medical attention if irritation persists.

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

No data available

### 5. FIRE FIGHTING MEASURES

#### 5.1. Extinguishing media

Water, alcohol resistant foam, CO<sub>2</sub>, dry chemical powder.

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

Development of hazardous/toxic combustion or decomposition gases/vapors possible in the event of fire; nitrogen oxides, metal oxides.

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing in case of fire.

## 6. ACCIDENTAL RELEASE MEASURES

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

**For non-emergency personnel:** Keep unnecessary and unprotected personnel from entering. Avoid breathing dusts and contact with skin and eyes. Wear appropriate personal protective equipment as described in Section 8. Follow the advice for safe handling and use given in Section 7.

**For emergency responders:** Evacuate the accident area. Avoid breathing dusts and contact with skin and eyes. Wear appropriate personal protective equipment as described in Section 8. Follow the advice for safe handling and use given in Section 7.

### 6.2. Environmental protection measures

Do not empty into drains and sewers. Keep from entering to water and ground water systems. Contain spillage where possible and safe to do so. Inform appropriate authority in case of accidental contamination of watercourses or drains.

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

Sweep the material and put in an appropriate waste disposal container for proper disposal. Avoid dust formation.

### 6.4. Reference to other sections

Review safety handling information in Section 7, personal protection measures in Section 8 and disposal measures in Section 13.

## 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling

**Protective measures:** Avoid breathing dusts and contact with skin and eyes. Provide adequate ventilation. Use personal protective equipment. Take off all contaminated clothing immediately and never use before washing. Emergency eye wash fountains and emergency showers should be available in workplace. Eliminate all kind of ignition sources.

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**Hygiene measures:** Do not eat, drink or smoke when handling this product. Wash hands thoroughly after handling.

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

Store in accordance with local regulations. Store in well-ventilated area and away from combustible and incompatible materials (metals and reducing agents), food and drink.

### 7.3. Specific end uses

No further relevant information available.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Occupational exposure limits

The product contains no ingredient with occupational exposure limit.

#### Derived effect levels

No data available for product.

#### Predicted effect concentrations

No data available for product.

### 8.2. Exposure controls

#### Personal protective equipment



#### Respiratory Protection:

Use FFP1 type dust mask with EN 143 standard.

#### Eye/Face Protection:

Wear safety glasses with EN 166 standard.

#### Hand Protection:

Wear protective gloves with EN 388 standard.

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### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

### Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

### Environmental exposure controls

Should not be released into the environment. Prevent product from entering drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. General information

Appearance	: Solid
Color	: White - off white
Odor	: Odorless
Odor threshold	: No data available
pH	: No data available
Melting point	: 116,67 °C
Boiling point	: No data available
Flammable properties	: No data available
Auto ignition temperature	: No data available
Flash point	: No data available
Explosive properties	: No data available
Vapor pressure	: No data available
Specific gravity	: 1,12 g/cm <sup>3</sup>
Bulk density	: 70.0 (Vibrated) / 77.3 (Loose)
Water solubility	: Soluble; 316 g/l
Partition coefficient	: No data available
Viscosity	: No data available

### 9.2. Other information

No additional information available

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### 10. STABILITY AND REACTIVITY

#### 10.1. Reactivity

No data available

#### 10.2. Chemical stability

The product is stable under recommended storage and handling conditions.

#### 10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

#### 10.4. Conditions to avoid

No data available

#### 10.5. Incompatible materials

Metals, acids, alkalis and combustible materials

#### 10.6. Hazardous decomposition products

Nitrogen oxides

### 11. TOXICOLOGICAL INFORMATION

#### 11.1. Information on toxicological effects

##### Acute toxicity

##### Calcium Ammonium Nitrate:

Oral: LD<sub>50</sub> (rat, female): 300 - 2000 mg/kg bw

Dermal: LD<sub>50</sub> (rat, male/female) > 2000 mg/kg bw

##### Skin corrosion/irritation

Not classified as irritant

##### Serious eye damage/irritation

Causes serious eye damage

##### Sensitization

Not classified as sensitizing

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### **Carcinogenicity**

Not classified as carcinogen

### **Mutagenicity**

No data available

### **Reproductive toxicity**

No data available

### **Specific target organ toxicity (single exposure)**

The substance is not classified as a specific target organ toxicant

### **Specific target organ toxicity (repeated exposure)**

The substance is not classified as a specific target organ toxicant

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### **Calcium Ammonium Nitrate:**

Fish: LC<sub>50</sub> (48 h): 447 mg/L

Daphnia: EC<sub>50</sub> (48 h) > 100 mg/L

Algae: EC<sub>50</sub> (72 h) > 100 mg/L

### 12.2. Persistence and degradability

No data available

### 12.3. Bioaccumulative potential

No data available.

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

Result of PBT and vPvB assessment : No data available

### 12.6. Other adverse effects

No data available.



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### 13. DISPOSAL CONSIDERATIONS

#### 13.1. Methods of disposal

The generation of waste should be avoided or minimized wherever possible. Disposal should be in accordance with applicable regional, national and local laws and regulations. Consult the local waste contractor and the local authority.

#### 13.2. European waste catalogue (EWC)

According to the European Waste Catalogue, waste codes are not product specific, but application specific. Waste codes should be assigned by the user.

#### 13.3. Contaminated packaging

This material and its container should be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

### 14. TRANSPORT INFORMATION

#### 14.1. UN number

The product is not subjected to the requirements of UN ADR/RID, ADNR, IMDG and IATA because of SP 208 of Calcium Nitrate.

#### Special Provision 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 these Regulations.

#### 14.2. UN number

Not relevant

#### 14.3. UN proper shipping name

Not relevant

#### 14.4. Transport hazard class(es)

Not relevant

#### 14.5. Packing group

Not relevant

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### 14.6. Environmental hazards

Not relevant

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

Not relevant

## 15. REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006, (REACH),
- Commission Regulation (EU) No 453/2010 amending Regulation (EC) No 1907/2006,
- Council Directive 67/548/EEC, (DSD),
- Regulation (EC) No 1272/2008 (CLP),
- Commission Directive 2006/15/EC,
- Commission Directive 2000/39/EC
- Council Directive 91/689/EEC,
- ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

## 16. OTHER INFORMATION

### 16.1. Indication of changes to the previous revision

Date Prepared : July 7<sup>th</sup>, 2014

Revision No : 1

Revision Date : June 12<sup>th</sup>, 2014

### 16.2. Abbreviations and acronyms

ADNR : Regulation for the Carriage of Dangerous Substances on the Rhine

ADR : European Agreement Concerning the Int. Carriage of Dangerous Goods by Road

CAS No : Chemical Abstract Service Index Number

CLP : Regulation of Classification, Labelling and Packaging of Chemicals

DNEL : Derived No Effect Level

DPD : Dangerous Preparations Directive

DSD : Dangerous Substances Directive

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EC No	: European Commission Number
EC50	: Half Maximal Effective Concentration
GHS	: Globally Harmonized System of Classification and Labeling Of Chemicals
H302	: Harmful if swallowed
H318	: Causes serious eye damage
IATA	: International Air Transport Association
ICAO	: International Civil Aviation Organization
IMDG	: International Maritime Code for Dangerous Goods
LC50	: Median Lethal Concentration
LD50	: Median Lethal Dose
PBT	: Persistent Bioaccumulative Toxic
PNEC	: Predicted No Effect Concentration
Ppm	: Part Per Million
R22	: Harmful if swallowed
R41	: Risk of serious damage to eyes
RID	: International Rule for Transport of Dangerous Substances by Railway
TWA	: Time Weighted Average
vPvB	: Very Persistent, Very Bioaccumulative

### 16.3. Further Information

The information contained within this Safety Data Sheet is believed to be accurate and have been compiled from sources believed to be reliable. It is offered for consideration, investigation and verification. It is the user's responsibility to follow the guidelines as outlined within this SDS. The user assumes all risk of use, storage and handling in compliance with applicable laws and regulations.