



TOROS TARIM
SAFETY DATA SHEET

Calcium Ammonium Nitrate EC FERTILIZER- TOROS CAN

According to Regulation (EU) No 2015/830

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

1.1. Product identifier

Product name Calcium Ammonium Nitrate EC FERTILIZER- TOROS CAN

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

Identified uses It is used as fertilizer in agricultural applications.

1.3. Details of the supplier of the safety data sheet

Manufacturer **Center: Toros Tarım Sanayi ve Ticaret A.Ş.**
Tekfen Tower Büyükdere Cad. No:209
34394 4. Levent Şişli / İstanbul
T: +90 212 357 02 02
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1.4. Emergency telephone number

Ceyhan Üretim Tesisleri: Tel: 0322 634 22 22
Samsun Üretim Tesisleri: Tel: +90 362 256 09 80

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards Ox. Liq. 2 - H272
Human health Eye Irrit. 2 - H319
Environment Not classified.

The Full Text for all Hazard Statements are Displayed in Section 16.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008



Signal Word Danger

Hazard Statements

H272 May intensify fire; oxidiser.
H319 Causes serious eye irritation.

Precautionary Statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
P221 Take any precaution to avoid mixing with combustibles and reducing agents.
P280 Wear protective gloves/protective clothing/eye protection/face protection.



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P264	Wash contaminated skin thoroughly after handling.
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 in accordance with local regulations.

2.3. Other hazards

Inhalation of decomposition gases, including ammonia and oxides of nitrogen, may cause abrasive effects and irritation in the respiratory system. Some lung functions may be inhibited. The product does not extinguish, but supports combustion even in airless environment. It melts when heated and causes decomposition. Toxic gases such as nitrogen oxides (NOx) and ammonia (NH3) are released. High resistance to detonation.

Inhalation	If concentration is high, it may damage the burr and the upper respiratory system. May cause sore throat and coughing.
Skin contact	Prolonged contact with skin may cause irritation, redness and debris.
Eye contact	May cause redness and burning.
Ingestion	Trivial toxic effects when swallowed in small quantities. Swallowing in high quantities may cause gastrointestinal disturbances. Rarely can form methemoglobin formation and cyanosis.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Name	REACH registration number	EC No.	CAS No.	Content	Classification (EC 1272/2008)
Ammonium nitrate	01-2119490981-27-0059	229-347-8	6484-52-2	> 74 %	Ox. Liq. 2 - H272 Eye Irrit. 2 - H319

The Full Text for all Hazard Statements are Displayed in Section 16.

Composition Comments

- The data shown are in accordance with the latest EC Directives.
- A mixture of ammonium nitrate and calcium carbonate (limestone); 80% dense ammonium nitrate, less than 20% calcium carbonate and the amount of combustible material should be less than 0.04%
- Nitrogen content should not be less than 20%. This product may also contain some inert substances, limestone and / or dolomite.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

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. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion

Stop if the affected person feels sick as vomiting may be dangerous. Rinse mouth thoroughly with water. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Skin contact

Take off immediately all contaminated clothing. Rinse immediately with plenty of water. Continue to rinse get medical attention.

Eye contact

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse get medical attention.



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

Inhalation	Upper respiratory tract irritation. Cough.
Ingestion	Nausea, vomiting.
Skin contact	Redness.
Eye contact	Irritation, redness and burning.

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

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable. Water should be used as an extinguisher.

Unsuitable fire extinguishers:

Chemical extinguisher, foam sand, steam should not be used.

5.2. Special hazards arising from the substance or mixture

Specific hazards

In case of fire, toxic gases may be formed. Carbon monoxide (CO). Carbon dioxide (CO₂). Flammable materials will enter the reaction causing fire because it is a strong oxidizer. Ammonium nitrate is classified as an explosive if it is contaminated with organic substances or 0.2% by inorganic flammable substances. Ammonium nitrate is classified as an explosive if it is contaminated with organic substances or 0.2% by inorganic flammable substances. In case of fire toxic gases are released. The released toxic gases are either in the form of NO_x or NH₃ gas according to the presence of oxygen in the environment.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Avoid breathing fire vapours. Clear fire area of all non-emergency personnel.

Move container from fire area if it can be done without risk. Dike and collect extinguishing water.

Protective equipment for fire-fighters

Face mask, protective gloves and safety helmet.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of dust. Avoid dust formation. In presence of powdery product, use full-face protective mask with filter. Avoid contact with eyes. Provide adequate ventilation. Pay attention to slippery bases and surfaces in case of spillage.

6.2. Environmental precautions

Avoid discharge into water courses or onto the ground. In case of spills or discharges to the water source, it is necessary to apply to the relevant environmental agency or other appropriate inspection centers immediately.

6.3. Methods and material for containment and cleaning up

Large Spillages: Shovel into dry containers. Cover and move the containers. Flush the area with water.

Small Spillages: Remove small spills with vacuum cleaner.

6.4. Reference to other sections

For personal protection, see section 8.

See section 11 for additional information on health hazards.

For waste disposal, see section 13.



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SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid handling which leads to dust formation. Avoid contact with eyes. Eye wash facilities and emergency shower must be available when handling this product. Avoid dust formation. In case of dust formation use appropriate mask. Good personal hygiene is necessary. Do not eat, drink or smoke when using the product. Observe good chemical hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in a dry, cool place in tightly closed original packaging. It should be stored away from combustible materials, reducing agents and strong bases. The containers used for storage should be stainless steel. Keep away from food, drinks and animal feed. Protect yourself from direct sunlight. Use explosion-proof material. Equipment such as power tools, switches and fuse boxes should be placed outside the warehouse as much as possible. During the storage of packaged products, exposure to high temperature differences should be avoided.

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

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
General powder	TLV	---	10 mg/m ³	---	---	ACGIH

TLV: Threshold Limit Value

8.2. Exposure controls

Protective equipment



Process conditions

Provide eyewash, quick drench.

Engineering measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of dust.

Respiratory equipment

P2 type dust mask should be used when dust concentration is high. If there is gassing, a full face gas mask or a tubular mask should be used.

Eye protection

Appropriate safety goggles (EN 166) or face order should be used.

Hygiene measures

Wash hands after contact. Change work clothing daily before leaving work place.
Wash contaminated clothing before reuse. When using do not eat, drink or smoke.

Skin protection

Chemical gloves should not be used for prolonged contact. (EN 374- 1,EN-374-2, EN-374-3, EN 388, EN 420, EN 346)

Environmental Exposure Controls

Please act in accordance with local and national laws.



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Colour	White or broken white prill
Odour	Odorless
Solubility	Ammonium nitrate has a high water solubility, Calcium carbonate is slightly soluble in water. The product is hygroscopic, keeping the moisture of the air.
Melting Point	No information available.
Initial boiling point and range	No information available.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	No information available.
Bulk density	900-1100 kg/m ³
Relative density	1.72 (20°C)
pH-Value	>4.5 (10 % solution)
Oxidative properties	Supports combustion and oxidation
Explosive properties	EEC test is not explosive according to A14 (67/548 / EEC). The fertilizer has high resistance against explosion. This resistance is reduced due to the contaminants in the contents and / or high temperature. Heating in enclosed spaces (tube, duct etc.); Especially if the materials listed in Chapter 10, 2 are contaminated, lead to severe reactions and explosions

9.2. Other information

No information required.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable under the prescribed storage conditions.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Heating in closed containers (pipe, duct, etc.); especially if the substances listed in Section 10.5 are contaminated it causes severe reactions and explosions. In the case of alkali materials such as lime, ammonia gas is released.

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Flammable and reducing substances, acids, alkalis, sulfur, chlorides, chromites, nitrites, permanganates, metallic powders and metals such as copper, nickel cobalt, zinc and alloys of these metals. Do not mix with grease, oils, fuels, acids, alkalis, and oxidants.

10.6. Hazardous decomposition products

When overheated, the product melts and decomposes to produce toxic smoke.



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SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

LD 50 >2000 mg/kg Oral – rat (OECD Guideline 401)

Skin corrosion/irritation

Based on available data the classification criteria are not met.
May cause skin irritation and redness.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation:

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

STOT-single exposure

Based on available data the classification criteria are not met.

STOT-repeated exposure

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Reproductive Toxicity

Based on available data the classification criteria are not met.

Aspiration Toxicity

Based on available data the classification criteria are not met.

Inhalation

Dust may irritate throat and respiratory system and cause coughing.

Ingestion

May cause discomfort if swallowed. Gastrointestinal complaints including nausea.
May cause Methemoglobin syndrome

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Low level aquatic toxicity for aquatic organisms. Based on available data the classification criteria are not met.

TLM, 96 hour	: 10-1000 ppm	
LC50, Fish, 96 hour	: 6000 mg/l	(Sakmo gairdneri)
EC50, Daphnia	: 83 mg/l	(Daphnia magna)

12.2. Persistence and degradability

The NO₃⁻ ion is the strongest form of plant nutrition. Then the resultant nitrogen in the natural nitrification / denitrification cycle is released.

12.3. Bioaccumulative potential

The product does not show on bioaccumulation.

12.4. Mobility in soil

Soluble in water. The NO₃⁻ ion is mobile, the NH₄⁺ ion is absorbed by the soil.



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12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

No information required.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Avoid access to water sources and channels. The product packaging must be completely emptied and must be disposed of within the framework of legislation.

SECTION 14: TRANSPORT INFORMATION

General

This substance/mixture may be classified as hazardous. However, it may be dispatched as non-hazardous substance in cases when the packaging is under limited / exceptional quantity. Please follow the relevant regulations.

14.1. UN number

UN No. (ADR/RID/ADN)	2067
UN No. (IMDG)	2067
UN No. (ICAO)	2067

14.2. UN proper shipping name

Proper Shipping Name AMMONIUM NITRATE BASED FERTILIZER

14.3. Transport hazard class(es)

ADR/RID/ADN Class	5.1
ADR/RID/ADN Class	Class 5.1: Oxidising substances
ADR Label No.	5.1
IMDG Class	5.1
ICAO/IATA Class	5.1
Transport Labels	



14.4. Packing group

ADR/RID/ADN Packing group	III
IMDG Packing group	III
ICAO/ IATA Packing group	III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

Limited Quantities	5Kg
EMS	F-H, S-Q



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Emergency Action Code 1Z
Hazard No. (ADR) 50
Tunnel Restriction Code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply.
Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40.
CHIP for everyone HSG(108).

EU Legislation

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.
Regulation (EC) No 1907/2006.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms used in the safety data sheet

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
IATA: International Air Transport Association.
ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
CAS: Chemical Abstracts Service.
ATE: Acute Toxicity Estimate.
LC₅₀: Lethal Concentration to 50 % of a test population.
LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
EC₅₀: 50% of maximal Effective Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent and Very Bioaccumulative.

Classification procedures

Ox. Sol. 2 - H272 Expert assessment.
Eye Irrit. 2 - H319 Calculation method.

Hazard Statements in Full

H272 May intensify fire; oxidiser.
H319 Causes serious eye irritation.

Revision Comments

Revised in compliance with current regulations.



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Issued Note

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