



TOROS TARIM
SAFETY DATA SHEET

Ammonium Nitrate EC FERTILIZER- TOROS AN

Commission Regulation (EU) 2020/878 of 18 June 2020.

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

1.1. Product identifier

Product name

Ammonium Nitrate EC FERTILIZER- TOROS AN

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

Supplier

Toros Tarım Sanayi ve Ticaret A.Ş.
Tekfen Tower Büyükdere Cad. No:209
34394 4. Levent Şişli / İstanbul
T: +90 212 357 02 02
F: +90 212 357 02 31
www.toros.com.tr

1.4. Emergency telephone number

Mersin Manufacture Plant: Tel: +90 324 234 31 00

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards

Ox. Sol. 2 - H272

Human health

Eye Irrit. 2 - H319

Environment

Not classified.

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.

P264

Wash contaminated skin thoroughly after handling.



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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-xxxx	229-347-8	6484-52-2	> 94 %	Ox. Sol. 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.
- In fertilizers with a nitrogen (N) content of at least 31.5% the rate of combustible matter identified as carbon cannot exceed 0,2%.
- 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

There are no official special limits.

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	The product is hygroscopic at 1900 g / l (20 ° C). Keeps moisture in the air.
Boiling point	The product decomposes above 210 ° C before reaching the boiling point
Melting Point	169°C
Relative density	1.72 (20°C)
pH-Value	>4.5 (10 % solution)
Evaporation rate	No information available
Upper/lower flammability or explosive limits	No information available
Flammability (solid, gas)	No information available
Auto-ignition temperature	No information available
Vapour pressure	No information available
Vapor Density	No information available
Relative density	No information available
Solubility(ies)	No information available
Density	No information available
Coefficient of dispersion: n-octanol / water	No information available
Decomposition Temperature	No information available
Oxidising properties	Supports combustion and oxidation
Explosion 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.



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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.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

LD 50	2950 mg/kg Oral – rat	(OECD Guideline 401)
LD 50	>5000 mg/kg Dermal – rat	(OECD Guideline 401)

Serious eye damage/irritation

Causes serious eye irritation.

Skin corrosion/irritation

Based on available data the classification criteria are not met.

Skin sensitisation

Based on available data the classification criteria are not met.

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.

Inhalation

Dust may irritate throat and respiratory system and cause coughing.

Ingestion

May cause discomfort if swallowed.

Eye contact

Causes serious eye irritation.

Ingestion

If swallowed, it causes irritation. Gastrointestinal complaints including nausea. May cause Methemoglobin syndrome.

11.2. Information on other hazards

No information available.



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SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Low level aquatic toxicity for aquatic organisms.

TLM, 96 hour	: 10-1000 ppm	
LC50, Fish, 96 hour	: 6000 mg/l	(Sakmo gairdneri)
LC50, Fish, 48 hour	: 447 mg/l	(Cyprinus carpio)
EC50, Alg	: 83 mg/l	(Scenedesmus quadricauda)

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.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

No information available

12.7. 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 or ID number

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



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

14.7. Maritime transport in bulk according to IMO instrument

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

- Commission Regulation (EU) 2020/878 of 18 June 2020.
- Health and Safety at Work etc. Act 1974 (as amended).
- 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) (as amended).
- 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).

Restrictions (Annex XVII Regulation 1907/2006)

There are no known restrictions on the use of this product.

Seveso Directive - Control of major accident hazards

Not relevant.

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.



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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 Calculation method.
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.

Issued By

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Issued Note

This SDS is prepared based on the information and documents received from product owner. CRAD or/and SDS author shall not be responsible for incorrect prepared of SDS and pecuniary loss or intangible damages because of deficient or wrong information and documents which comes from product owner

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