



TOROS TARIM
SAFETY DATA SHEET

Zincous and Ferrous Composite Fertilizer

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 Zincous and Ferrous Composite Fertilizer
Product Types NPK 13-24-12 + (10SO₃) + Fe + Zn
NPK 13-24-12 + 1Zn + 1Fe Composite Fertilizer
Product description Inorganic Chemical fertilizer

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

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 Not classified.
Human health Not classified.
Environment Aquatic Chronic 3 - H412.

2.2. Label elements

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

Pictogram Not necessary

Signal word Not necessary

Hazard Statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements

P501 Dispose of contents/container in accordance with national regulations.

2.3. Other hazards

Inhalation May cause respiratory tract irritation.

Ingestion Ingestion of small amounts of toxic junk. In case of ingestion in high quantities, may cause gastrointestinal disturbances

Skin contact May cause slight irritation.

Eye contact May cause irritation.



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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Name	EC No.	CAS No.	Content	Classification (EC 1272/2008)
Iron (II) Sulfate hepta hydrate	---	7782-63-0	1-10%	Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319
Zinc Oxide	215-222-5	1314-13-2	<2%	Aquatic Acute 1 - H400 (M=1) Aquatic Chronic 1 - H410(M=1)

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.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Wash your nose and mouth with plenty of water. Remove to fresh air. Get medical attention if any discomfort continues.

Ingestion

Rinse mouth thoroughly with water. If a large amount is swallowed, get medical attention if any discomfort continues.

Skin contact

Wash with soap and water. Get medical attention if any discomfort continues.

Eye contact

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

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

Inhalation Upper respiratory tract irritation. Cough.

Ingestion Nausea, vomiting.

Skin contact Negative effect is not expected.

Eye contact Slight irritation, redness.

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). Ammonia gas, phosphorus oxides, nitrogen oxides.



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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.

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.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Do not eat, drink or smoke when using the product.
Avoid dust formation. In case of dust formation use appropriate mask. Protect from direct sunlight.

7.2. Conditions for safe storage, including any incompatibilities

Store in a dry, cool place in tightly closed original packaging. The containers used for storage should be stainless steel. Keep away from food, drinks and animal feed. Protect yourself from direct sunlight.

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
Zinc Oxide	TLV	---	10 mg/m ³	---	---	
General powder	TLV-OSHA	5 mg/m ³	15 mg/m ³	---	---	

TLV: Threshold Limit Value

OSHA: Occupational Safety and Health Administration



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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

If ventilation is insufficient, suitable respiratory protection must be provided.

Hand protection

Use protective gloves made of: Rubber, neoprene or PVC. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection

Wear dust resistant safety goggles where there is danger of eye contact.

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

Wear apron or protective clothing in case of splashes.

Environmental Exposure Controls

Please act in accordance with local and national laws.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Granule
Colour	Brown / Black
Odour	Ammonia smell, in closed areas.
Solubility	Soluble in water.
Boiling point	No data available.
Melting Point	No data available.
Upper/lower flammability or explosive limits	No information available
Relative density	No data available.
Flammability (solid, gas)	No information available
pH-Value	7 (10% solution)
Vapour pressure	<1 mm Hg
Vapor Density	No information available
Bulk density	~ 0.9 gr / cm ³ (loose) ~ 1.0 gr / cm ³ (compressed)
Decomposition temperature	No data available.
Distribution Coefficient (n-octanol / water)	No data available.



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Oxidizing properties Not oxidising

Explosion properties Not explosive

9.2. Other information

No information required.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

This product does not show any special reactive hazard.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Not polymerization occurs.

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Alkalis, strong acids, copper and its alloys.

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 >2000 mg/kg Oral – rat (Method: Calculation)

Skin corrosion / irritation

Based on available data the classification criteria are not met.

Serious eye damage / irritation

Based on available data the classification criteria are not met. May causes slight 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.

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.

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.



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Inhalation

May be irritating to throat and respiratory system in case of intensive exposure

Ingestion

Excessive ingestion may cause gastrointestinal disturbances.

11.2. Information on other hazards

No information available

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Based on available data the classification criteria are not met.

12.2. Persistence and degradability

No data available. Stable and suitable for water and soil balance.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Soluble in water.

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

It should not be released uncontrollably around the periphery. May be harmful for aquatic life.

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.

The Environmental Officer will be informed about all major rashes.

SECTION 14: TRANSPORT INFORMATION

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

14.1. UN number or ID number

Not available.

14.2. UN proper shipping name

Not available.

14.3. Transport hazard class(es)

Not available.

14.4. Packing group

Not available.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.



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14.6. Special precautions for user

Not available.

14.7. Maritime transport in bulk according to IMO instrument

Not available.

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.

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.

Revision Comments

Revised in compliance with current regulations.

Hazard Statements In Full

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.



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Issued Note

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