



TOROS TARIM
SAFETY DATA SHEET

Sulphuric acid

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	Sulphuric acid
CAS No	7664-93-9
EC No	231-639-5

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

Identified uses Manufacture of fertilizers, pharmaceuticals, petroleum industry etc. used.

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
	F: +90 212 357 02 31
	www.toros.com.tr

1.4. Emergency telephone number

Samsun Production Facilities: +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	Skin Corr. 1A - H314
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

CAS No	7664-93-9
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Signal Word	Danger
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Hazard Statements

H314	Causes severe skin burns and eye damage.
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Precautionary Statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.



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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

No data available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Name	EC No.	CAS No.	Content	List no
Sulphuric acid	231-639-5	7664-93-9	100 %	016-020-00-8

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.
- Exposure limits are displayed in section 8.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Remove affected person from source of contamination. Chemical burns should be treated by a doctor. Show this safety data sheet.

Inhalation

Remove affected person from source of contamination. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Call doctor immediately.

Ingestion

DO NOT INDUCE VOMITING AND DO NOT GIVE ANYTHING TO DRINK TO AN UNCONCIOUS PERSON. Rinse mouth thoroughly with water. Get medical attention if symptoms occur.

Skin contact

Remove affected person from source of contamination. Take off immediately all contaminated clothing. Rinse immediately with plenty of water. Get medical attention if symptoms occur.

Eye contact

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

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

- | | |
|---------------------|---|
| Inhalation | Upper respiratory tract irritation. |
| Ingestion | Nausea, vomiting. May cause chemical burns in mouth and throat. |
| Skin contact | Serious irritation. May cause skin burns. |
| Eye contact | Blurred vision. Irritation, serious eye damage. |

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

Treat Symptomatically.



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SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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). Sulfur oxides.

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. Dispose residues of extinguishing water in accordance with local regulations.

Protective equipment for fire-fighters

In case of fire, wear self-contained breathing apparatus and full protective clothing.
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 vapours. Avoid contact with skin and eyes. Pay attention to slippery bases and surfaces in case of spillage. Provide adequate ventilation.

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 centres immediately.

6.3. Methods and material for containment and cleaning up

Absorb spillage into a non-flammable absorbent material. Transfer to a container for disposal. Store waste in closed containers suitable for this purpose.

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

Read and follow the manufacturer's recommendations. Avoid inhalation of vapours. Avoid contact with skin and eyes. Good personal hygiene is necessary. Wash hands and contaminated areas before leaving the workplace. Do not eat, drink or smoke when using the product. Observe good chemical hygiene practices. Containers should be stored tightly closed. Avoid direct sunlight. Avoid contact with bases.

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 alkaline products, strong bases and metals. Storage must be grounded. Keep away from food, drink and animal feeding. Protect from direct sunlight. Store away from excessive heat, combustible material, organic matter, water or humid air, oxidants, amines and bases. If necessary, acid is added to water and the opposite is never done.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
Sulphuric acid	TLV	---	0.05 mg/m ³	---	---	---

TLV: Threshold Limit Value

TWA: Time weighted average

STEL: Short term exposure limit

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 vapours.

Respiratory equipment

No special equipment required under normal conditions. If vapour concentration is higher than the exposure limit, proper respiratory protective equipment should be used.

Hand protection

Wear suitable protective gloves when there is a risk of skin contact. Neoprin, nitrile, polyethylene or PVC.

The most appropriate glove should be selected in consultation with the glove supplier. The glove supplier will be able to provide information about the permeability / deterioration time of the glove material.

Eye protection

If there is a risk of splashing, wear safety goggles or face shield.

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

Use proper protective gloves when there is risk of skin contact (PVC).

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	Transparent oily liquid
Colour	Colourless
Odour	Odorless, but when it is hot it has a stifling smell
Solubility	It soluble easily in cold water and produces a lot of heat. Soluble in alcohol.
Melting Point	3°C (100%), -32°C (93%), -38°C (78%), -64°C (65%).
Initial boiling point and range	290°C



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Flash point	No data available
Evaporation rate	No data available
Vapor pressure @ 20 ° C	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Degradation temperature	340°C
Density	1 N solution (~ 5% w/w) = 0.3 0.1 N solution (~ 0.5% w/w) = 1.2 0.01 N solution (~ 0.05% w/w) = 2.1
pH-Value	No data available
Oxidative properties	Not oxidising.
Explosive properties	Not explosive.

Not used as product specification.

9.2. Other information

No information available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

No known.

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight. If necessary, acid is added to water and the opposite is never done.

10.5. Incompatible materials

Organic substances, water or moist air, oxidants, amines and bases.

10.6. Hazardous decomposition products

There is no information on harmful decomposition products.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Oral (rat) : LD 50 2140 mg/kg (Using 25% solution)
Inhalation (rat), 2 hours : LC 50 510 mg/m³ (calculated in pure substance)

Skin corrosion/irritation

Causes severe skin burns.

Serious eye damage/irritation

Causes serious eye damage.



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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

May be harmful to health by inhalation. It may cause damage to the nose, throat, lungs and bronchi system.

Swallowing

Harmful if swallowed. May cause chemical burns in mouth, esophagus and stomach.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

It has caustic effects diluted in toxic applications to fish and seaweeds.

Aquatic invertebrate toxicity

EC50, 24 hours 29 mg/l Daphnia magna (purity)

12.2. Persistence and degradability

The product is easily biodegradable.

12.3. Bioaccumulative potential

It causes bioaccumulation by surrounding surface water.

12.4. Mobility in soil

Soluble in water. High mobility in soil.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

It should not be released to the environment.

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.



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SECTION 14: TRANSPORT INFORMATION

General

This substance 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)	1830
UN No. (IMDG)	1830
UN No. (ICAO)	1830

14.2. UN proper shipping name

Proper Shipping Name	SULPHURIC ACID
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14.3. Transport hazard class(es)

ADR/RID/ADN Class	8
ADR/RID/ADN Class	Class 8: Corrosive substances
ADR Label No.	8
IMDG Class	8
ICAO/IATA Class	8
Transport Labels	



14.4. Packing group

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

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

Limited Quantities	1 L
EMS	F-A, S-B
Emergency Action Code	2P
Hazard No. (ADR)	80
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

UK Regulatory References

Chemicals (Hazard Information & Packaging) Regulations.
Fire precautions Act 1971.

Environmental Listing

No listing noted.



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Statutory Instruments

Export of Dangerous Chemicals Regulations.

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. 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.

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.

EC No: European Community number

CAS: Chemical Abstracts Service.

LC₅₀: Lethal Concentration to 50 % of a test population.

LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).

PBT: Persistent, Bioaccumulative and Toxic substance.

vPvB: Very Persistent and Very Bioaccumulative.

SEA: Classification, labeling, packaging regulation

BHOT: Specific Target Organ Toxicity

Information Sources

This SDS is written based on the information received from rawmaterial supplier.

European Chemicals Agency (ECHA)

Revision Comments

Revised in compliance with current regulations.

Hazard Statements in Full

H314 Causes severe skin burns and eye damage.

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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