Safety Data Sheet

SDS Number	SDS-45
Prepare Date	07.03.2013
Revision Date	22.01.2022
Revison	7

SULFURIC ACID %93-99

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Sulfuric acid %93 - %99
CAS-No	7664-93-9

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

Production of sulphuric acid, as an intermediate in manufacture of inorganic and organic chemicals incl. fertilizers, as a processing aid, catalyst, dehydrating agent, pH regulator, for extractions and processing of minerals, ores, in the process of surface treatments, purification and etching, in electrolytic processes, in gas purification, scrubbing, flue gas scrubbing, in production and recycling of sulphuric acid contained batteries, in industrial cleaning, mixing, preparation and repackaging of sulphuric acid;

1.3 Details of the supplier of the safety data sheet

Company	Likit Kimya Sanayi Ticaret A.Ş.
Terminal Address	Terminal Adress: Seymen Yolu. 3.km Marmara Ereğlisi/Tekirdağ
Terminal Telephone	+90 282 613 41 38
Offical Address	Nartanesi Sokak 16/A, Küçükbakkalköy, 34750 Ataşehir/ İstanbul, Türkiye
Offical Telephone	+90 216 499 30 00 (pbx)
E-mail	info@likitkimya.com onu_evcil@likitkimya.com ibrahim_caginda@likitkimya.com
Web sites	www.likitkimya.com

1.4 Emergency telephone number

Emergency Phone	112
Company information desk	+90 282 613 41 38

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

H314 Causes severe skin burns and eye damage.

H290 May be corrosive to metals

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Safety Data Sheet

SDS Number	SDS-45
Prepare Date	07.03.2013
Revision Date	22.01.2022
Revison	7

SULFURIC ACID %93-99

likitkimya

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word Danger

Hazard statement(s)

H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage.

Precautionary statement(s)

P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

None

3. Composition/information on ingredients

3.1 Substances

Formula H_2SO_4

Molecular weight 98,08 g/mol

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
Sulfuric Acid			
CAS No	7664-93-9	Met. Corr.1 ;Skin Corr. 1A H290, H314	93 ≤ C ≤ 100 %
EC No	231-639-5		
Index No	016-020-00-8	Concentration limits: >= 15 %: Skin Corr. 1A, H314; 5 - < 15 %: Skin Irrit. 2, H315; 5 - < 15 %: Eye Irrit. 2, H319; 0.1 - 100 %: Met. Corr. 1, H290;	

Terminal Adres: Seymen Yolu. 3.km Marmaraereğlisi/Tekirdağ
Onur EVCİL– onur_evcil@likitkimya.com
İbrahim Çağında – ibrahim_caginda@likitkimya.com

4. First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

5. Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Sulpher oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

Terminal Adres: Seymen Yolu. 3.km Marmaraereğlisi/Tekirdağ
Onur EVCİL– onur_evcil@likitkimya.com
İbrahim Çağında – ibrahim_caginda@likitkimya.com

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Avoid inhalation of vapour or mist.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Non-combustible, corrosive hazardous materials.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Derived No Effect Level (DNEL)

Ingredients	CAS-No	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Sulfuric acid	**7664-93-9**	TWA	0,5 mg/m³	ACGIH
		STEL	1 mg/m³	ACGIH

Predicted No Effect Concentration (PNEC)

Compartment	Value
Marine water	0,00025 mg/l
Fresh water	0,0025 mg/l
Marine sediment	0,002 mg/kg
Fresh water sediment	0,002 mg/kg
Onsite sewage treatment plant	8,8 mg/l

8.2 Exposure controls

Appropriate engineering control

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Terminal Adres: Seymen Yolu. 3.km Marmaraereğlisi/Tekirdağ
Onur EVCİL– onur_evcil@likitkimya.com
İbrahim Çağında – ibrahim_caginda@likitkimya.com

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Fluorinated rubber

Minimum layer thickness: 0,7 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,2 mm

Break through time: 30 min

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de,
test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industria situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Terminal Adres: Seymen Yolu. 3.km Marmaraereğlisi/Tekirdağ
Onur EVCİL– onur_evcil@likitkimya.com
İbrahim Çağında – ibrahim_caginda@likitkimya.com

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Form	liquid
		Colour	colourless
b)	Odour	No data available.	
c)	Odour Threshold	No data available.	
d)	pH	< 1	
e)	Melting point/freezing point	10° C	
f)	Initial boiling point and boiling range	290 °C	
g)	Flash point	Not applicable.	
h)	Evaporation rate	No data available	
i)	Flammability (solid, gas)	No data available	
j)	Upper/lower flammability or explosive limits	No data available	
k)	Vapour pressure	1,00 mm-Hg at 145,8° C	
l)	Vapour density	3,39- (Air=10)	
m)	Relative density	1,84 g/cm³ (25 °C)	
n)	Water solubility	soluble	
o)	Partition coefficient: noctanol/water	No data available	
p)	Auto-ignition temperature	No data available	
q)	Decomposition temperature	No data available	
r)	Viscosity	No data available	
s)	Explosive properties	No data available	
t)	Oxidizing properties	No data available	

9.2 Other safety information

No data available

10. Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

Terminal Adres: Seymen Yolu. 3.km Marmaraereğlisi/Tekirdağ
Onur EVCİL– onur_evcil@likitkimya.com
İbrahim Çağında – ibrahim_caginda@likitkimya.com

10.5 Incompatible materials

Bases, Halides, Organic materials, Carbides, fulminates, Nitrates, picrates, Cyanides, Chlorates, alkali halides, Zinc salts, permanganates, e.g. potassium permanganate, Hydrogen peroxide, Azides, Perchlorates., Nitromethane, phosphorous, Reacts violently with:, cyclopentadiene, cyclopentanone oxime, nitroaryl amines, hexalithium disilicide, phosphorous(III) oxide, Powdered metals.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Sulphur oxides
Other decomposition products - No data available In the event of fire: see section 5.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 2,140 mg/kg(Sulfuric acid)

LC50 Inhalation - Rat - 2 h - 510 mg/m3(Sulfuric acid)

Skin corrosion/irritation

Skin - Rabbit(Sulfuric acid)

Result: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Eyes - Rabbit(Sulfuric acid)

Result: Corrosive to eyes

Respiratory or skin sensitisation

No data available(Sulfuric acid)

Germ cell mutagenicity

No data available.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available.(Sulfuric acid)

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available.

Additional Information

RTECS: WS5600000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi,pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath,

Terminal Adres: Seymen Yolu. 3.km Marmaraereğlisi/Tekirdağ
Onur EVCİL– onur_evcil@likitkimya.com
İbrahim Çağında – ibrahim_caginda@likitkimya.com

Headache, Nausea, Vomiting, Pulmonary edema. Effects may be delayed., To the best of our knowledge,the chemical, physical, and toxicological properties have not been thoroughly investigated.(Sulfuric acid)

12. Ecological information

12.1 Toxicity

Toxicity to fish	LC50 - Gambusia affinis (Mosquito fish) - 42 mg/l - 96 h(Sulfuric acid)
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 29 mg/l - 24 h(Sulfuric acid)

12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.(sulfuric acid)

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. .

12.6 Other adverse effects

No data available

13. Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packagin

Dispose of as unused product.

14. Transport information

14.1 UN number

ADR/RID: 1830 IMDG: 1830 IATA: 1830

14.2 UN proper shipping name

ADR/RID	SULFURIC ACID SOLUTION
IMDG	SULFURIC ACID SOLUTION
IATA	Sulfuric acid solution

Terminal Adres: Seymen Yolu. 3.km Marmaraereğlisi/Tekirdağ
Onur EVCİL– onur_evcil@likitkimya.com
İbrahim Çağında – ibrahim_caginda@likitkimya.com

14.3 Transport hazard class(es)

ADR/RID: 8	IMDG: 8	IATA: 8

14.4 Packaging group

ADR/RID: II	IMDG: II	IATA: II

14.5 Environmental hazards

ADR/RID: no	IMDG Marine pollutant: no	IATA: no

14.6 Special precautions for user

No data available.

15. Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

16. Other information

Full text of H-Statements referred to under sections 2 and 3.

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

Further information

 The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Likit Kimya Company and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.likitkimya.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Terminal Adres: Seymen Yolu. 3.km Marmaraereğlisi/Tekirdağ
Onur EVCİL– onur_evcil@likitkimya.com
İbrahim Çağında – ibrahim_caginda@likitkimya.com