



Sulphuric acid 0.5M Volumetric Solution

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 20/03/2015

Revision date: 22/01/2016

Version: 1.1

WWW.FASTMSDS.COM

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Name : Sulphuric acid 0.5M
Volumetric Solution
Product code : VL317

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

1.2.1. Relevant identified uses

Main use category : Professional use, Industrial use
Use of the substance/mixture : Laboratory chemical
Function or use category : Laboratory chemicals

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Spectracer UK Ltd.

Second Floor,
27 Gloucester Place,
London,
W1U 8HU,
United Kingdom.

Tel: +44 (0) 207 193 9114

Fax: +44 (0) 203 432 4686

Email: contact@spectracer.co.uk

Web: www.spectracer.com

1.4. Emergency telephone number

Emergency number : Tel: +44(0)1933 445260 Option 1. Language: English only.
For Chemical Emergencies Only
Llewellyn (Safety Advisors) Europe Ltd

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964	
United Kingdom	National Poisons Information Service (NHS Direct)	http://www.npis.org	111 (England & Wales only) or 112 (EU) or 08454 24 24 24 (Scotland)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH210 - Safety data sheet available on request

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
sulphuric acid	(CAS No) 7664-93-9 (EC no) 231-639-5 (EC index no) 016-020-00-8	1 - 5	Skin Corr. 1A, H314

Specific concentration limits:

Name	Product identifier	Specific concentration limits
sulphuric acid	(CAS No) 7664-93-9 (EC no) 231-639-5 (EC index no) 016-020-00-8	(5 =<C < 15) Eye Irrit. 2, H319 (5 =<C < 15) Skin Irrit. 2, H315 (C >= 15) Skin Corr. 1A, H314

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

No additional information available

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat and ignition sources. Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

sulphuric acid (7664-93-9)		
EU	Local name	Sulphuric acid (mist)
EU	IOELV TWA (mg/m ³)	0,05 mg/m ³
Austria	Local name	Schwefelsäure
Austria	MAK (mg/m ³)	0,1 mg/m ³
Austria	MAK Short time value (mg/m ³)	0,2 mg/m ³
Belgium	Local name	Acide sulfurique
Belgium	Limit value (mg/m ³)	1 mg/m ³
Bulgaria	Local name	Сярна киселина
Bulgaria	OEL TWA (mg/m ³)	1 mg/m ³
Croatia	Local name	Sumporna kiselina
Croatia	GVI (granična vrijednost izloženosti) (mg/m ³)	0,05 mg/m ³
Croatia	Naznake (HR)	C EU***
Czech Republic	Local name	Kyselina sirová, jako SO
Czech Republic	Expoziční limity (PEL) (mg/m ³)	1 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	2 mg/m ³
Denmark	Local name	Svovlsyre
Denmark	Grænseværdie (langvarig) (mg/m ³)	1 mg/m ³
Estonia	Local name	Väävelhape, udu
Estonia	OEL TWA (mg/m ³)	0,05 mg/m ³
Finland	Local name	Rikkihappo
Finland	HTP-arvo (8h) (mg/m ³)	0,05 mg/m ³
Finland	HTP-arvo (15 min)	0,1 mg/m ³
France	Local name	Acide sulfurique
France	VME (mg/m ³)	1 mg/m ³
France	VLE (mg/m ³)	3 mg/m ³
Germany	Local name	Schwefelsäure
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	0,1 mg/m ³
Germany	Remark (TRGS 900)	DFG, EU, Y
Greece	OEL TWA (mg/m ³)	1 mg/m ³
Hungary	Local name	KÉN SAV
Hungary	AK-érték	0,05 mg/m ³
Hungary	Megjegyzések (HU)	m; l.
Latvia	Local name	Sērskābe3 (migla, kas tiek definēta kā torakālā frakcija)
Latvia	OEL TWA (mg/m ³)	0,05 mg/m ³
Lithuania	Local name	Sieros rūgštis (rūkas)
Lithuania	IPRV (mg/m ³)	0,05 mg/m ³
Lithuania	TPRV (mg/m ³)	3 mg/m ³

sulphuric acid (7664-93-9)		
Netherlands	Local name	Zwavelzuur (nevel), gedefinieerd als de thoracale fractie
Netherlands	Grenswaarde TGG 8H (mg/m ³)	0,05 mg/m ³
Netherlands	Grenswaarde TGG 8H (ppm)	0,012 ppm (Zwavelzuur (nevel), gedefinieerd als de thoracale fractie; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
Portugal	Local name	Ácido sulfúrico
Portugal	OEL TWA (mg/m ³)	0,2 mg/m ³
Romania	Local name	Acid sulfuric și anhidrida sulfuroasa
Romania	OEL TWA (mg/m ³)	0,50 mg/m ³
Romania	OEL STEL (mg/m ³)	1 mg/m ³
Slovenia	Local name	žveplova kislina - meгла in žveplov trioksid (merjeno kot žveplova kislina)
Slovenia	OEL TWA (mg/m ³)	0,05 mg/m ³
Spain	Local name	Ácido sulfúrico
Spain	VLA-ED (mg/m ³)	0,05 mg/m ³ niebla
Spain	Notes	(2014), az (Al seleccionar un método adecuado de control de la exposición, deben tomarse en consideración posibles limitaciones e interferencias que pueden surgir en presencia de otros compuestos de azufre.), VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país.), s (Esta sustancia tiene prohibida total o parcialmente su comercialización y uso como fitosanitario y/o como biocida. Para unainformación detallada acerca de las prohibiciones consúltese:Base de datos de productos biocidas:htthttp://www.msssi.gob.es/ciudadanos/productos.do?tipo=plaguicidasBase de datos de productos fitosanitarios:http://www.magrama.gob.es/agricultura/pags/fitos/registro/fichas/pdf/Lista_sa.pdf), d (Véase UNE EN 481: Atmósferas en los puestos de trabajo. Definición de las fracciones por el tamaño de las partículas para la medición de aerosoles.)
Sweden	Local name	Sulfuric acid
Sweden	nivågränsvärde (NVG) (mg/m ³)	1 mg/m ³
Sweden	kortidsvärde (KTV) (mg/m ³)	3 mg/m ³
United Kingdom	Local name	Sulphuric acid
United Kingdom	WEL TWA (mg/m ³)	0,05 mg/m ³ (mist)
United Kingdom	Remark (WEL)	The mist is defined as the thoracic fraction
Iceland	Local name	Brennisteinssýra
Iceland	OEL (8 hours ref) (mg/m ³)	1 mg/m ³
Norway	Local name	Svovelsyre, inhalerbar fraksjon
Norway	Grenseverdier (AN) (mg/m ³)	0,1 mg/m ³
Norway	Merknader (NO)	K
Switzerland	Local name	Acide sulfurique
Switzerland	VME (mg/m ³)	0,1 mg/m ³
Switzerland	VLE (mg/m ³)	0,1 mg/m ³
Switzerland	Remark (CH)	15 min
Australia	Local name	Sulphuric acid
Australia	TWA (mg/m ³)	1 mg/m ³

Sulphuric acid 0.5M

Volumetric Solution

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

WWW.FASTMSDS.COM

sulphuric acid (7664-93-9)		
Australia	STEL (mg/m ³)	3 mg/m ³
USA - ACGIH	Local name	Sulfuric acid
USA - ACGIH	ACGIH TWA (mg/m ³)	0,2 mg/m ³
USA - ACGIH	Remark (ACGIH)	Pulm func
USA - OSHA	Local name	Sulfuric acid
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³

8.2. Exposure controls

Appropriate engineering controls	: Provide adequate general and local exhaust ventilation. Ensure good ventilation of the work station.
Personal protective equipment	: Protective goggles. Gloves.
Hand protection	: Protective gloves
Eye protection	: Safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended



Environmental exposure controls	: Avoid release to the environment.
---------------------------------	-------------------------------------

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Miscible with water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

sulphuric acid (7664-93-9)	
LD50 oral rat	2140 mg/kg bodyweight (Test data of the pure substance; Rat; Equivalent or similar to OECD 401; Experimental value)
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

sulphuric acid (7664-93-9)	
LC50 fish 1	> mg/l >16 - <28,LC50; 96 h; Lepomis macrochirus; Static system; Fresh water
EC50 Daphnia 1	> 100 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
Threshold limit algae 1	> 100 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Desmodesmus subspicatus; Static system; Fresh water; Experimental value)

12.2. Persistence and degradability

sulphuric acid (7664-93-9)	
Persistence and degradability	Biodegradability: Not applicable. Hydrolysis in water. Biodegradability in soil: Not applicable. No (test)data available on mobility of the substance.
ThOD	Not applicable

12.3. Bioaccumulative potential

sulphuric acid (7664-93-9)	
Bioaccumulative potential	Bioaccumulation: Not applicable.

12.4. Mobility in soil

No additional information available



Sulphuric acid 0.5M

Volumetric Solution

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

WWW.FASTMSDS.COM

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- Waste disposal recommendations : Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.
- Ecology - waste materials : Avoid release to the environment.
- European List of Waste (LoW) code : 16 05 06* - laboratory chemicals consisting of or containing dangerous substances including mixtures of laboratory chemicals

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	sulphuric acid
--	----------------

3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

sulphuric acid

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 4)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : sulphuric acid is listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H314	Causes severe skin burns and eye damage
EUH210	Safety data sheet available on request

SDS EU Mod H F (REACH ANNEX II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.