

according to Regulation (EC) No 1907/2006

## 979-19 Sulfuric Acid

Revision date: 21.05.2015

Product code: 97909

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

## 1.1. Product identifier

979-19 Sulfuric Acid

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

## Use of the substance/mixture

Water analysis

## 1.3. Details of the supplier of the safety data sheet

Company name: Street: Place:	HACH LANGE GmbH Willstätterstr. 11 D-40549 Düsseldorf
Telephone: e-mail: Internet: Responsible Department:	+49 (0)211 5288-383 SDS@hach.com www.de.hach.com HACH LANGE Ltd. 5, Pacific Way Salford Manchester M50 1DL - United Kingdom Tel. +44 (0) 161 872 1487 * Fax +44 (0) 161 848 7324 e-Mail: info-uk@hach.com
	HACH LANGE Ltd. Unit 1, Chestnut Road Western Industrial Estate IRL-Dublin 12 Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com
<u>1.4. Emergency telephone</u> number:	Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service -

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

#### Regulation (EC) No. 1272/2008

Hazard categories: Substance or mixture corrosive to metals: Met. Corr. 1 Skin corrosion/irritation: Skin Corr. 1A Serious eye damage/eye irritation: Eye Dam. 1 Hazard Statements: May be corrosive to metals. Causes severe skin burns and eye damage.

## 2.2. Label elements

## Regulation (EC) No. 1272/2008

Hazard components for labelling sulphuric acid ... %

Signal word:

Pictograms:



Danger

# Hazard statements

H290

May be corrosive to metals.



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H314

Causes severe skin burns and eye damage.

#### **Precautionary statements**

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P280	Wear protective gloves/protective clothing/eye protection/face protection.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water
	or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
	present and easy to do. Continue rinsing.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310	Immediately call a POISON CENTER/doctor.
P390	Absorb spillage to prevent material damage.

### Additional advice on labelling

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

#### 2.3. Other hazards

None known.

## **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification according to	Regulation (EC) No. 1272/2008 [0	CLP]		
7664-93-9	sulphuric acid %			90-100 %	
	231-639-5	016-020-00-8			
	Skin Corr. 1A; H314				
7732-18-5	Water		1-10 %		
	231-791-2				

Full text of H and EUH statements: see section 16.

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

### General information

Take off all contaminated clothing immediately. Show this safety data sheet to the doctor in attendance.

### After inhalation

Move to fresh air. Consult a physician.

## After contact with skin

Wash off immediately with plenty of water for at least 15 minutes. Consult a physician. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. Show this safety data sheet to the doctor in attendance.

#### After contact with eyes

Rinse immediately with plenty of water for at least 15 minutes. Call a physician immediately.

## After ingestion

Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician immediately.



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

Irritation and corrosion, Cough, Shortness of breath

## 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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### Unsuitable extinguishing media

Water

#### 5.2. Special hazards arising from the substance or mixture

The product itself does not burn. Gives off hydrogen by reaction with metals. Reacts violently with water. Fire may liberate hazardous vapours.

#### 5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

#### Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

#### **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

### 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste.

## 6.4. Reference to other sections

13. Disposal considerations

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

## Advice on safe handling

Avoid contact with skin and eyes. Do not breathe vapours or spray mist. Use only in well-ventilated areas.

Further information on handling

Observe label precautions.

### 7.2. Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Keep away from heat. Keep container tightly closed in a dry and well-ventilated place.

## Hints on joint storage

Protect against Bases, Oxidizing agents, Metals

#### Further information on storage conditions

Keep locked up or in an area accessible only to qualified or authorised persons.

## 7.3. Specific end use(s)



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Reagent for analysis

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7664-93-9	Sulphuric acid (mist)	-	0.05		TWA (8 h)	WEL

### Additional advice on limit values

None known.

### 8.2. Exposure controls

#### Appropriate engineering controls

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Protective and hygiene measures

Wash hands before breaks and at the end of workday.

#### Eye/face protection

Safety glasses with side-shields

#### Hand protection

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact: Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0.40 mm, Breakthrough time: > 30 min

#### Skin protection

Avoid contact with skin, eyes and clothing.

## Respiratory protection

Ensure adequate ventilation, especially in confined areas.

## **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state: Colour: Odour:	liquid colourless stinging	
pH-Value (at 20 °C):		< 0,5
Changes in the physical state		
Melting point:		no data available
Initial boiling point and boiling range:		100 °C
Sublimation point:		not applicable
Softening point:		not applicable
Pour point:		not applicable
Flash point:		not applicable
Flammability		
Solid:		not applicable
Gas:		not applicable
Explosive properties not applicable		



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Lower explosion limits:	not applicable			
Upper explosion limits:	not applicable			
Ignition temperature:	not applicable			
Auto-ignition temperature Solid: Gas:	not applicable not applicable			
Decomposition temperature:	no data available			
Oxidizing properties not applicable				
Vapour pressure:	no data available			
Vapour pressure:	no data available			
Density (at 20 °C): Bulk density:	1,047 g/cm³ not applicable			
Water solubility:	soluble			
Solubility in other solvents no data available				
Partition coefficient:	no data available			
Viscosity / dynamic:	no data available			
Viscosity / kinematic:	no data available			
Flow time:	no data available			
Vapour density:	no data available			
Evaporation rate:	no data available			
Solvent separation test:	no data available			
Solvent content:	no data available			
9.2. Other information				
Solid content:	no data available			

## **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

Corrosive to metals

## 10.2. Chemical stability

Stable under recommended storage conditions.

## 10.3. Possibility of hazardous reactions

Reacts with the following substances: Alkali metals, Alkaline earth metals, Metals, Bases

## 10.4. Conditions to avoid

Extremes of temperature and direct sunlight. Decomposes on heating.

## 10.5. Incompatible materials

Bases, Oxidizing agents

## 10.6. Hazardous decomposition products

Gives off hydrogen by reaction with metals.

## Further information

Stable under recommended storage conditions.

## **SECTION 11: Toxicological information**



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## 11.1. Information on toxicological effects

## Acute toxicity

No data is available on the product itself.

#### Irritation and corrosivity Causes burns.

Causes builts.

#### Sensitising effects No known effect.

## Carcinogenic/mutagenic/toxic effects for reproduction

Contains no ingredient listed as a carcinogen

#### STOT-single exposure No known effect.

## STOT-repeated exposure

No known effect.

### Aspiration hazard

No aspiration toxicity classification

### Specific effects in experiment on an animal

No toxicology information is available.

#### Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

### **SECTION 12: Ecological information**

### 12.1. Toxicity

No data is available on the product itself.

## 12.2. Persistence and degradability

No data is available on the product itself.

## 12.3. Bioaccumulative potential

No data is available on the product itself.

### 12.4. Mobility in soil

no data available

### 12.5. Results of PBT and vPvB assessment

no data available

## 12.6. Other adverse effects

No known effect.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

### Advice on disposal

In accordance with local and national regulations.

### Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

#### Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste



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## Waste disposal number of contaminated packaging

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

## **SECTION 14: Transport information**

Land transport (ADR/RID)	
<u>14.1. UN number:</u>	UN 1830
14.2. UN proper shipping name:	Sulphuric acidsolution
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Inland waterways transport (ADN)	
Other applicable information (inland wan Not tested	aterways transport)
Marine transport (IMDG)	
<u>14.1. UN number:</u>	UN 1830
14.2. UN proper shipping name:	Sulphuric acid solution
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Marine pollutant:	
EmS:	F-A,S-B
Air transport (ICAO-TI/IATA-DGR)	
<u>14.1. UN number:</u>	UN 1830
14.2. UN proper shipping name:	Sulphuric acid solution
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
14.5. Environmental hazards	
ENVIRONMENTALLY HAZARDOUS:	no
14.6. Special precautions for user no data available	
14.7. Transport in bulk according to Annex	x II of Marpol and the IBC Code
not applicable	
dangerous goods for analytical or tes	nay be shipped as part of a chemical kit composed of various compatible sting purposes. This kit would have the following classification: Proper d Class: 9, UN Number3316, Package group II, EMS Code: F-A, S-P tire pack
SECTION 15: Regulatory information	
15.1. Safety, health and environmental reg	ulations/legislation specific for the substance or mixture
National regulatory information	
Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juven work protection guideline' (94/33/EC). Observe employment restriction under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Mater contenting class (D):	4

Water contaminating class (D):

1 - slightly water contaminating

according to the 'juvenile employment restrictions



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## 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

### **SECTION 16: Other information**

## Changes

Revision: 21.05.2015 Safety datasheet sections which have been updated: 2, 4, 11

## Relevant H and EUH statements (number and full text)

H290 H314

Causes severe skin burns and eye damage.

May be corrosive to metals.

### **Further Information**

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)