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

· 1.1 Product identifier

· Trade name: Sulphuric acid chem. pure approx. 96 %

· Article number: 111 · CAS Number: 7664-93-9 · EC number: 231-639-5

• Index number: 016-020-00-8

· Registration number 01-2119458838-20

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

No further relevant information available.

· Application of the substance / the mixture

Basic material with not specifically defined use.

Chemical.

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Möller Chemie GmbH & Co. KG

Bürgerkamp 1 D-48565 Steinfurt Tel.: 02551/9340-0 Fax: 02551/9340-60

- · Further information obtainable from: Product safety department
- · 1.4 Emergency telephone number:

Poison Control Center Mainz - 24 hour emergency service - Tel.: +49 (0) 6131/19240

### SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Met. Corr.1 H290 May be corrosive to metals.

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

Precautionary statements

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.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

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P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

#### · 2.3 Other hazards

The product does not contain any substance above the legal limits included on the list for endocrine disrupting properties established under Article 59(1) of Regulation (EC) No 1907/2006 or under Commission Delegated Regulation (EU) 2017/2100 or of Commission Regulation (EU) 2018/605 has endocrine disrupting properties.

- · Results of PBT and vPvB assessment
- · PBT:

The product does not contain any substances above legal limits that meet the criteria for PBT (persistent, bioaccumulative and toxic).

· vPvB:

The product does not contain any substances above legal limits that meet the criteria for vPvB (very persistent and very bioaccumulative).

## SECTION 3: Composition/information on ingredients

- · 3.1 Substances
- · CAS No. Description

7664-93-9 sulphuric acid

- · Identification number(s)
- · EC number: 231-639-5
- · Index number: 016-020-00-8
- · Specific concentration limits Skin Corr. 1A; H314:  $C \ge 15 \%$ Skin Irrit. 2; H315:  $5 \% \le C < 15 \%$

Eye Irrit. 2; H319:  $5\% \le C < 15\%$ 

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

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air.

Call a doctor immediately.

· After skin contact:

Immediately rinse with water.

Call a doctor immediately.

- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting.

Call a doctor immediately.

- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, powder or water spray. Fight larger fire with alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture

*In case of fire, the following can be released:* 

Sulphur dioxide (SO2)

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- · 5.3 Advice for firefighters
- · Protective equipment: Acid-proof protective clothing.
- · Additional information Cool endangered receptacles with water spray.

### SECTION 6: Accidental release measures

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

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

#### · 6.2 Environmental precautions:

Do not allow to enter sewers/surface or ground water.

Do not allow to penetrate the ground/soil.

#### · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust). Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

#### · 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## SECTION 7: Handling and storage

#### · 7.1 Precautions for safe handling

Avoid contact with eyes and skin.

When diluting always pour product into water and not vice versa.

· Information about fire - and explosion protection:

No special measures required.

The product is not flammable.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles:

Keep container tightly closed Keep us in a cool, well-ventilated place.

Do not use metal containers.

· Information about storage in one common storage facility:

Store away from metals.

Keep away from alkalis.

## · Further information about storage conditions:

Keep container tightly sealed.

Protect from humidity and water.

- · Storage class: 8B
- · 7.3 Specific end use(s) No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Immediately remove all soiled and contaminated clothing

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Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Be sure to clean skin thoroughly after work and before breaks.

· Respiratory protection:

Short term filter device:

Filter P2

· Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Fluorocarbon rubber (Viton)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection



Tightly sealed goggles

· Body protection: Acid resistant protective clothing

## SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information

Physical state
 Colour:
 Odourless
 Odourless
 Melting point/freezing point:

· Boiling point or initial boiling point and boiling

 range
 310 °C

 · Flash point:
 not applicable

 · pH at 20 °C
 < 1</td>

· Viscosity:

· Dynamic at 25 °C:

21 mPas

Solubility

• water: Fully miscible.
• Vapour pressure at 20 °C: > 0.0001 hPa

· Density and/or relative density

• **Density at 20 °C:** 1.8235 g/cm<sup>3</sup>

· 9.2 Other information

· Appearance:

· Form: Fluid

Important information on protection of health and environment, and on safety.

Explosive properties: Product does not present an explosion hazard.

Information with regard to physical hazard classes

· Explosives Void

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		(Contd. of page 4)
· Flammable gases	Void	
· Aerosols	Void	
· Oxidising gases	Void	
· Gases under pressure	Void	
· Flammable liquids	Void	
· Flammable solids	Void	
· Self-reactive substances and mixtures	Void	
Pyrophoric liquids	Void	
· Pyrophoric solids	Void	
· Self-heating substances and mixtures	Void	
· Substances and mixtures, which emit flammab	le	
gases in contact with water	Void	
· Oxidising liquids	Void	
· Oxidising solids	Void	
· Organic peroxides	Void	
· Corrosive to metals	May be corrosive to metals.	
· Desensitised explosives	Void	

## SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions

Exothermic reaction with alkalis.

Hydrogen evolution with metals.

- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials:

Alkalis

Metals

· 10.6 Hazardous decomposition products:

Thermal decomposition (pyrolysis) leads to the formation of hazardous gases (sulphur oxides).

## SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification:

LD50/oral/rat: 2140 mg/kg

Inhalative LC50/4h 0.375 mg/l (rat)

· Skin corrosion/irritation

Causes severe skin burns and eye damage.

· Serious eye damage/irritation

Causes severe skin burns and eye damage.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity 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.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties Substance is not listed.

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## SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

Harmful effect against fish and algae (50 mg/l).

Harmful effect on fish, plankton and stuck organisms due to pH shift.

· 12.2 Persistence and degradability

Inorganic product can not be eliminated from the water by biological purification processes.

- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- **PBT:** The product is not considered to be persistent, bioaccumulating nor toxic (PBT).
- · vPvB: The product is not considered to be persistent or very bioaccumulative (vPvB).
- · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

## **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- · Recommendation

Disposal according to local regulations.

Do not empty into drains.

- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

## SECTION 14: Transport information

· 14.1 UN number or ID number

· ADR, IMDG, IATA UN1830

· 14.2 UN proper shipping name

· ADR 1830 SULPHURIC ACID
· IMDG, IATA SULPHURIC ACID

- · 14.3 Transport hazard class(es)
- $\cdot ADR$



*Class* 8 (C1) Corrosive substances.

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	(Contd. of pa	
Label	8	
IMDG, IATA		
<u> </u>		
8		
Class	8 Corrosive substances.	
Label	8	
14.4 Packing group		
ADR, IMDG, IATA	II	
14.5 Environmental hazards:		
Marine pollutant:	No	
14.6 Special precautions for user	Warning: Corrosive substances.	
Hazard identification number (Kemler code):	80	
EMS Number:	F-A,S-B	
Segregation groups	(SGG1a) Strong acids	
Stowage Category	C	
Stowage Code	SW15 For metal drums, stowage category B.	
Segregation Code	SG36 Stow "separated from" SGG18-alkalis.	
	SG49 Stow "separated from" SGG6-cyanides	
14.7 Maritime transport in bulk according to IM	10	
instruments	Not applicable.	
Transport/Additional information:		
ADR		
Limited quantities (LQ)	IL	
Excepted quantities (EQ)	Code: E2	
	Maximum net quantity per inner packaging: 30 ml	
	Maximum net quantity per outer packaging: 500 ml	
Transport category	2	
Tunnel restriction code	E	
IMDG		
Limited quantities (LQ)	IL .	
Excepted quantities (EQ)	Code: E2	
	Maximum net quantity per inner packaging: 30 ml	
	Maximum net quantity per outer packaging: 500 ml	
UN "Model Regulation":	UN 1830 SULPHURIC ACID, 8, II	

## **SECTION 15: Regulatory information**

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 75
- · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

Substance is not listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

Substance is not listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS Substance is not listed.

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· Regulation (EC) No 273/2004 on drug precursors Substance is not listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

Substance is not listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department
- · Contact: Mrs. Steyer
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr.1: Corrosive to metals – Category 1

Skin Corr. 1A: Skin corrosion/irritation - Category 1A

EU