

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.02.2023

Version number 1

Revision: 16.02.2023

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

- **1.1 Product identifier**
- **Trade name:** Phenolsulfonic acid 65%
- **Article number:** 390
- **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** Catalyst
- **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**



GHS08 health hazard

Muta. 2 H341 Suspected of causing genetic defects.



GHS05 corrosion

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

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

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

STOT SE 3 H335 May cause respiratory irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05



GHS07



GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**
4-hydroxybenzenesulphonic acid
phenol
sulphuric acid

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· Hazard statements

H290 May be corrosive to metals.
 H332 Harmful if inhaled.
 H314 Causes severe skin burns and eye damage.
 H341 Suspected of causing genetic defects.
 H335 May cause respiratory irritation.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P103 Read carefully and follow all instructions.
 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).
 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

· 3.2 Mixtures

· Description: Mixture: consisting of the following components.

· Dangerous components:

CAS: 98-67-9 EINECS: 202-691-6	4-hydroxybenzenesulphonic acid Met. Corr. 1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318	65.0%
CAS: 108-95-2 EINECS: 203-632-7 Index number: 604-001-00-2	phenol Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; Muta. 2, H341; STOT RE 2, H373; Skin Corr. 1B, H314 Specific concentration limits: Skin Corr. 1B; H314: $C \geq 3 \%$ Skin Irrit. 2; H315: $1 \% \leq C < 3 \%$ Eye Irrit. 2; H319: $1 \% \leq C < 3 \%$	2.0%
CAS: 7664-93-9 EINECS: 231-639-5 Index number: 016-020-00-8	sulphuric acid Met. Corr. 1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318 Specific concentration limits: Skin Corr. 1A; H314: $C \geq 15 \%$ Skin Irrit. 2; H315: $5 \% \leq C < 15 \%$ Eye Irrit. 2; H319: $5 \% \leq C < 15 \%$	2.0%

· Additional information:

For the wording of the listed hazard phrases refer to section 16.

CAS-No.: 98-67-9 Phenolsulfonic acid (4-Hydroxybenzenesulphonic acid)

REACH-Registration number: 01-2119538813-35

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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. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
- **After skin contact:** After contact with skin, wash immediately with plenty of water.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
Remove contact lenses.
- **After swallowing:**
Drink plenty of water and provide fresh air. Call for a doctor immediately.
Do not induce vomiting.
- **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 fires with water spray.
- **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)
Carbon monoxide, carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **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 item 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** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not mandatory.
- **Further information about storage conditions:**
Protect from frost.

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- Keep container tightly sealed.
- **Storage class:** 8 - Corrosive substances
- **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:**

108-95-2 phenol

IOELV	Long-term value: 8 mg/m ³ , 2 ppm
	Skin

7664-93-9 sulphuric acid

IOELV	Long-term value: 0.1 E mg/m ³
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· **DNELs**

108-95-2 Phenol

Workers:

Inhalation: Long-term exposure: 8 mg/m³Short-term exposure: 16 mg/m³

Skin: Long-term exposure: 1.23 mg/kg body weight/day

Consumer

:

Inhalation: Long term exposure: 452 µg/m³Skin: Long-term exposure: 500 µg/m³ body weight/dayOral: Long-term exposure: 500 µg/m³ body weight/day

98-67-9 - Phenolsulfonic acid

Workers:

Inhalation: Long-term exposure: 24.7 mg/m³

Skin: Long-term exposure: 7 mg/kg body weight/day

Consumer:

Inhalation: Long-term exposure: 4.35 mg/m³

Skin: Long-term exposure: 2.5 mg/kg body weight/day

Oral: Long-term exposure: 2.5 mg/kg body weight/day

· **PNECs**

108-95-2 Phenol

Fresh water: 7.7 µg/l

Fresh water - intermittent: 31 µg/l

Sea water: 770 ng/l

Sewage treatment plant: 2.1 mg/l

Freshwater sediment: 91.5 µg/kg dry weight (TW)

Marine sediment: 9.15 µg/kg dry weight (TW)

Soil: 136 µg/kg dry weight (TW)

98-67-9 Phenolsulfonic acid

Fresh water: 73 µg/l

Fresh water - intermittent: 730 µg/l

Sea water: 7.3 µg/l

Sewage treatment plant: 65 mg/l

Freshwater sediment: 350 µg/kg dry weight (TW)

Marine sediment: 35 µg/kg dry weight (TW)

Soil: 27.5 µg/kg dry weight (TW)

- **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

- **Appropriate engineering controls** No further data; see item 7.

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- **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.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Colour:** Red-brown
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** > 0 °C
- **Boiling point or initial boiling point and boiling range** > 100 °C
- **Flammability** Not applicable.
- **Lower and upper explosion limit**
- **Lower:** Not determined.
- **Upper:** Not determined.
- **Flash point:** No data available.
- **Decomposition temperature:** Not determined.
- **pH at 23 °C** 1.5
- **Viscosity:**
- **Kinematic viscosity** Not determined.
- **Dynamic:** Not determined.
- **Solubility**
- **water:** completely miscible
- **Partition coefficient n-octanol/water (log value)** Not determined.
- **Vapour pressure:** Not determined.
- **Density and/or relative density**
- **Density at 20 °C:** 1.345 g/cm³

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· Relative density	<i>Not determined.</i>
· Vapour density	<i>Not determined.</i>
· 9.2 Other information	
· Appearance:	
· Form:	<i>Fluid</i>
· Important information on protection of health and environment, and on safety.	
· Auto-ignition temperature:	<i>Product is not selfigniting.</i>
· Explosive properties:	<i>Product does not present an explosion hazard.</i>
· Change in condition	
· Evaporation rate	<i>Not determined.</i>
· Information with regard to physical hazard classes	
· Explosives	<i>Void</i>
· Flammable gases	<i>Void</i>
· Aerosols	<i>Void</i>
· Oxidising gases	<i>Void</i>
· Gases under pressure	<i>Void</i>
· Flammable liquids	<i>Void</i>
· Flammable solids	<i>Void</i>
· Self-reactive substances and mixtures	<i>Void</i>
· Pyrophoric liquids	<i>Void</i>
· Pyrophoric solids	<i>Void</i>
· Self-heating substances and mixtures	<i>Void</i>
· Substances and mixtures, which emit flammable gases in contact with water	<i>Void</i>
· Oxidising liquids	<i>Void</i>
· Oxidising solids	<i>Void</i>
· Organic peroxides	<i>Void</i>
· Corrosive to metals	<i>May be corrosive to metals.</i>
· Desensitised explosives	<i>Void</i>

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** *No dangerous reactions known.*
- **10.4 Conditions to avoid** *No further relevant information available.*
- **10.5 Incompatible materials:**
 - Oxidizing agent*
 - Strong bases*
 - Strong acids*
- **10.6 Hazardous decomposition products:** *No dangerous decomposition products known.*

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity**
 - Harmful if inhaled.*

· **LD/LC50 values relevant for classification:**

ATE (Acute Toxicity Estimates)

Dermal	LD50	42,500 mg/kg
Inhalative	LC50/ 4h	16.7 mg/l

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108-95-2 phenol		
Dermal	LD50	850 mg/kg (rabbit)
Inhalative	LC50/ 4h	3 mg/l (ATE)
7664-93-9 sulphuric acid		
Inhalative	LC50/ 4h	0.375 mg/l (rat)

- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity**
Suspected of causing genetic defects.
- **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**
May cause respiratory irritation.
- **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.
- **Additional toxicological information:**
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.
- **11.2 Information on other hazards**

· Endocrine disrupting properties
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None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
98-67-9 Phenolsulfonic acid
Fish toxicity:
LC50/96h: 128 mg/l

7664-93-9 Sulfuric acid
Fish toxicity:
LC50/96h: 16 - 28 mg/l

108-95-2 Phenol
Fish toxicity:
LC50/96h: 8.9 - 67.5 mg/l
- **12.2 Persistence and degradability** Easily biodegradable
- **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 mixture is considered to be persistent, bioaccumulating nor toxic (PBT).
- **vPvB:** The mixture is not considered to be persistent nor very bioaccumulative (vPvB).
- **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation Disposal according to local regulations.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN number or ID number	UN1803
· ADR, IMDG, IATA	
· 14.2 UN proper shipping name	1803 PHENOLSULPHONIC ACID, LIQUID
· ADR	PHENOLSULPHONIC ACID, LIQUID
· IMDG, IATA	
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group	II
· ADR, IMDG, IATA	
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Hazard identification number (Kemler code):	80
· Stowage Category	E
· Stowage Code	SW15 For metal drums, stowage category B.
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· IMDG	
· Limited quantities (LQ)	1L
· 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 1803 PHENOLSULPHONIC ACID, LIQUID, 8, II

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SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **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.

- **Relevant phrases**

H290 May be corrosive to metals.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H341 Suspected of causing genetic defects.
H373 May cause damage to organs through prolonged or repeated exposure.

- **Department issuing SDS:** Product safety department

- **Contact:** Mrs. Steyer

- **Abbreviations and acronyms:**

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
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
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
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Muta. 2: Germ cell mutagenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2