

# SAFETY DATA SHEET according to regulation (EG) Nr. 1907/2006

Product name: Steam Cleaner STP

Revision date 20.01.2018

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

### Product identifier

Product name: Steam Cleaner STP

### Details of the producer/supplier

Address: EOS Saunatechnik GmbH  
Schneiderstriesch 1  
35759 Driedorf  
Tel.: +49 (0) 2775 82-149

Emergency telephone number: Germany: Poison emergency centre Berlin: 030/30686-790  
Please contact the regional company representation in your country

### Synonyms

Solution of phosphoric acid (about 40 %) in water, inhibited against metal corrosion

## 2. Hazards identification

This product is a mixture. REACH Registration Number see section 3 (REGULATION (EC) No 1272/2008)

Corrosive to metals, Category 1, H290 Skin  
corrosion, Category 1B, H314

### Hazard pictograms



Danger

### Hazard statements

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

### Prevention

P260 After use wash extensively  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. Response  
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P 304 IF INHALING: Bring to fresh air and a stable position, which relieves to breathe  
P309 + P310 IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.  
P363 Contaminated clothing is to be washed before next use.

### Storage

P405 Store under lock

### Disposal

P501 Disposal of content/packaging according to regional regulations

## 3. Composition/information on ingredients chemical

Identification:	CAS-No.	7664-38-2	ortho-phosphoric acid 25 – 50 %
	EG-No.	015-011-00-6	
	EINECS-No.	2316332	
	UN-No.	1805	

Ingredients: Phosphoric acid 40 %

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## 4. First aid measures

**General advices:** Remove contaminated clothing  
**After inhalation:** fresh air. Call in physician.  
**After skin contact:** wash off with plenty of water. Immediately remove contaminated clothing. If available swab with polyethylene glycol 400. Call a physician immediately  
**After eye contact:** rinse out with plenty of water. Immediately call in ophthalmologist  
**After swallowing:** Make victim drink water (2 glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.  
**Advices for physician:** Irritation and corrosion, Cough, Shortness of breath, Pain, Spasm, shock, conjunctivitis, Risk of blindness!

## 5. Firefighting measures

**Suitable extinguishing media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. For this substance/mixture no limitations of extinguishing agents are given.

**Special hazards arising from the substance or mixture**  
Not combustible.  
Ambient fire may liberate hazardous vapours.  
Fire may cause evolution of: Oxides of phosphorus

**Advice for firefighters** Special protective equipment for firefighters  
Stay in danger area only with self-contained breathing apparatus.  
Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

**Further information** Suppress (knock down) gases/vapours/mists with a water spray jet.  
Prevent fire extinguishing water from contaminating surface water or the ground water system

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

**Advice for emergency responders:** Protective equipment see section 8.  
**Environmental precautions:** Do not let product enter drains.  
**Methods and materials for containment and cleaning up:** Cover drains. Collect, bind, and pump off spills.  
Observe possible material restrictions (see sections 7 and 10).  
Take up with liquid-absorbent and neutralising material. Dispose of properly.  
Clean up affected area.  
Indications about waste treatment see section 13.

## 7. Handling and Storage

**Precautions for safe handling:** Advice on safe handling. Observe label precautions.  
**Hygiene measures:** Immediately change contaminated clothing. Apply preventive skin protection.  
Wash hands and face after working with substance.

**Conditions for safe storage, including any incompatibilities** Tightly closed, Store above + 10°C

## 8. Exposure controls/personal protection

**Engineering measures** Technical measures and appropriate working operations should be given priority over the use of personal protective equipment  
**Individual protection measures** Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

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**Respiratory protection:** Required when vapours/aerosols are generated.  
Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful substances The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**Hand protection:**  
Glove material: Nitrile rubber  
Glove thickness: 0,11 mm Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact). The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet (>, <) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

**Eye/face protection:** Tightly fitting safety goggles  
**Other protective equipment:** Acid-resistant protective clothing

**Environmental exposure controls:** Do not let product enter drains.

## 9. Physical and chemical properties

<b>Appearance:</b>	Shape: fluid		
	Colour: Slightly brown	Odour: nearly odourless	
<b>Vapour pressure:</b>	at 20 °C	0,03 hPa	
<b>Density:</b>	at 20 °C	1,22 g/ml	
<b>Boiling point:</b>	at 1013 mbar	213 °C	
<b>Melting point:</b>		-21 °C	
<b>Flash point:</b>	not applicable		
<b>Explosion hazard:</b>	not applicable		
<b>Water solubility:</b>	by 20 °C	soluble	
<b>pH:</b>	<2/20°C		
<b>VOC</b>	EU 0,00 %		
	EU g/l		
	CH 0,00 %		

## 10. Stability and reactivity

**Conditions to avoid:** Strong heating above 200°C

**Possibility of hazardous reactions:** Corrosive in contact with metals.  
Risk of ignition or formation of inflammable gases or vapours with:  
Metals, metal alloys Possible formation of: Hydrogen  
Violent reactions possible with: bases, metallic oxides

**Incompatible materials:** Aluminium, iron/iron-containing compounds, Mild steel Gives off hydrogen by reaction with metals.

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## 11. Toxicological information

<b>Acute Toxicology</b>	Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach., Pain
<b>Acute inhalation toxicity</b>	Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract This information is not available.
<b>Acute dermal toxicity</b>	This information is not available.
<b>Skin irritation</b>	Mixture causes burns.
<b>Eye irritation</b>	Mixture causes serious eye damage. conjunctivitis Risk of blindness!
<b>Sensitisation</b>	This information is not available.
<b>Germ cell mutagenicity</b>	This information is not available.
<b>Carcinogenicity</b>	This information is not available.
<b>Reproductive toxicity</b>	This information is not available.
<b>Teratogenicity</b>	This information is not available.
<b>Specific target organ toxicity - single exposure</b>	This information is not available.
<b>Specific target organ toxicity - repeated exposure</b>	This information is not available.
<b>Aspiration hazard</b>	This information is not available.
<b>Further information</b>	Quantitative data on the toxicity of this product are not available.
<b>Further toxicological data:</b>	Systemic effects: Convulsions, shock Further data: Handle in accordance with good industrial hygiene and safety practice.

### Components

phosphoric acid

<b>Acute oral toxicity</b>	LD50 rat: 1.530 mg/kg (IUCLID) (Regulation (EC) No 1272/2008, Annex VI) Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.
<b>Acute inhalation toxicity</b>	LC50 rat: > 0,85 mg/l; 1 h (RTECS) Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract
<b>Acute dermal toxicity</b>	LD50 rabbit: 2.740 mg/kg (IUCLID)
<b>Skin irritation</b>	rabbit Result: Causes burns. (IUCLID)
<b>Eye irritation</b>	rabbit Result: Causes burns. (IUCLID)
<b>Sensitisation Patch test:</b>	human Result: negative (IUCLID)
<b>Germ cell mutagenicity</b>	
<b>Genotoxicity in vitro Ames test</b>	Result: negative (IUCLID)

## 12. Ecological information Mixture

<b>Toxicity</b>	No information available
<b>Persistence and degradability</b>	No information available.
<b>Bioaccumulative potential</b>	No information available.
<b>Mobility in soil</b>	No information available.
<b>Results of PBT and vPvB assessment</b>	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
<b>Other adverse effects</b>	Additional ecological information
<b>Biological effects:</b>	Harmful effect due to pH shift. Caustic even in diluted form.
<b>Further information on ecology</b>	Depending on the concentration, phosphorus compounds may contribute to the eutrophication of water supplies. Discharge into the environment must be avoided.

### Components - phosphoric acid

<b>Toxicity to fish</b>	LC50 Gambusia affinis (Mosquito fish): 138 mg/l; 96 h (External MSDS)
<b>Toxicity to bacteria</b>	EC50 activated sludge: 270 mg/l(IUCLID)
<b>Biodegradability</b>	Does not cause biological oxygen deficit.
<b>Water hazard class</b>	1

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## 13. Disposal considerations

**General advices:** Disposal as household waste is not allowed.  
Disposal according to regional requirements

**Packaging:** Disposal of contaminated packaging is to be handled as the product itself

## 14. Transport information

**Land transport ADR/RID:** Class: 8 (C1)  
UN-No.: 1805  
Packaging group III  
Proper shipping name: POSPHORIC ACID, SOLUTION  
Environmentally hazardous: ---  
Special precautions for user yes  
Tunnel restriction code E

**Sea transport IMDG:** Class: 8 UN 1805  
Page 8204 Package group: III  
EMS-No. F-A,S-B marine pollutant: no  
MFAG 700  
Proper shipping name: PHOSPHORIC ACID, SOLUTION

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not relevant

**Air transport IATA:** ICAO/IATA Class 8  
UN-No. 1805  
Packaging group III  
Proper shipping name: PHOSPHORIC ACID, SOLUTION  
Environment hazardous: --  
Special precautions for user: no

## 15. Regulatory information

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

### EU regulations:

Major Accident Hazard Legislation 96/82/EC  
Directive 96/82/EC does not apply  
Occupational restrictions Take note of Dir 94/33/EC on the protection of young people at work.

### National legislation

Storage class 8B

**Chemical Safety Assessment** For this product a chemical safety assessment was not carried out.

## 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.

Training advice Provide adequate information, instruction and training for operators.

Key or legend to abbreviations and acronyms used in the safety data sheet Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

### Further information

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.