

### SEILFLECHTER TANK U. LEITUNGSREINIGER Art.-Nr. 975112S

Revision date: 06.04.2020

Page 1 of 11

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

### 1.1. Product identifier

SEILFLECHTER TANK U. LEITUNGSREINIGER Art.-Nr. 975112S

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

#### Use of the substance/mixture

Washing and cleaning products/ Biocide

#### Uses advised against

No information available.

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

Company name:	Seilflechter-Tauwerk GmbH	
Street:	Auf dem Anger 7-9	
Place:	D-38110 Braunschweig	
Telephone:	+49(0)5307-9611-0	
e-mail:	info@seilflechter.de	
Contact person:	Abteilung Produktsicherheit	Telephone: +49(0)2233 9323 760
Responsible Department:	info@drkeddo.de	

**1.4. Emergency telephone number:** +49 (0) 361-730730 (24 h, GIZ Erfurt)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Causes skin irritation.

Causes serious eye irritation.

Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

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

**Signal word:** Warning

**Pictograms:**



#### Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

#### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**SEILFLECHTER TANK U. LEITUNGSREINIGER Art.-Nr. 975112S**

Revision date: 06.04.2020

Page 2 of 11

P337+P313 If eye irritation persists: Get medical advice/attention.  
P501 Dispose of contents/container to an appropriate recycling or disposal facility.

**Special labelling of certain mixtures**

Read label before use. / Read attached instructions before use.

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
77-92-9	Citric acid			<9,9 %
	201-069-1		01-2119457026-42	
	Eye Irrit. 2; H319			
68424-85-1	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides			1 - < 5 %
	270-325-2		01-2119965180-41	
	Acute Tox. 4, Skin Corr. 1B, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 1); H302 H314 H400 H410			

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

**Labelling for contents according to Regulation (EC) No 648/2004**

&lt; 5 % phosphonates, preservation agents (Benzalkonium chloride).

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Change contaminated, saturated clothing.

**After inhalation**

Remove casualty to fresh air and keep warm and at rest. In case of respiratory tract irritation, consult a physician.

If unconscious place in recovery position and seek medical advice.

**After contact with skin**

Change contaminated, saturated clothing. And wash it before reuse.

After contact with skin, wash immediately with plenty of water and soap.

In case of skin irritation, consult a physician.

**After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

**After ingestion**

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Never give anything by mouth to an unconscious person or a person with cramps.

Do NOT induce vomiting.

Call a POISON CENTER if you feel unwell.

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

No known symptoms to date.

### SEILFLECHTER TANK U. LEITUNGSREINIGER Art.-Nr. 975112S

Revision date: 06.04.2020

Page 3 of 11

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

First Aid, decontamination, treatment of symptoms.

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

Water spray jet, Carbon dioxide (CO<sub>2</sub>), Dry extinguishing powder, alcohol resistant foam

##### **Unsuitable extinguishing media**

Full water jet

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

In case of fire may be liberated:

Pyrolysis products, toxic; Nitrogen oxides (NO<sub>x</sub>); Carbon dioxide; Carbon monoxide

#### **5.3. Advice for firefighters**

Co-ordinate fire-fighting measures to the fire surroundings.

In case of fire: Wear self-contained breathing apparatus. Use of protective clothing

#### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

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

See protective measures under point 7 and 8.

Personal protection equipment: see section 8

Remove persons to safety. Provide adequate ventilation.

#### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

Cover drains.

In case of entry into waterways, soil or drains, inform the responsible authorities.

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

Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Wipe up with absorbent material (eg. cloth, fleece).

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

Ensure waste is collected and contained. Retain contaminated washing water and dispose it.

#### **6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

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

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Wear personal protection equipment (refer to section 8).

Avoid contact with skin, eyes and clothes.

Don't store containers without labelling.

provide inert absorbent.

Avoid: Inhalation of vapours or spray/mists

##### **Advice on protection against fire and explosion**

Usual measures for fire prevention.

### SEILFLECHTER TANK U. LEITUNGSREINIGER Art.-Nr. 975112S

Revision date: 06.04.2020

Page 4 of 11

#### Further information on handling

Use biocides safely. Always read the label and product information before use. Collect spillage.

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

##### Requirements for storage rooms and vessels

Technical measures and storage conditions: No special technical protective measures are necessary.

Packaging materials: Keep/Store only in original container.

Keep container tightly closed. Store in a well-ventilated place.

Provide for retaining containers, eg. floor pan without outflow.

##### Hints on joint storage

Keep away from food, drink and animal feedingstuffs. Keep away from: Oxidizing agent, Strong acid, Strong alkali

##### Further information on storage conditions

No information available.

#### 7.3. Specific end use(s)

Observe instructions for use.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
57-55-6	Propane-1,2-diol, particulates	-	10		TWA (8 h)	WEL

##### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
77-92-9	Citric acid			
57-55-6	Propane-1,2-diol			
	Worker DNEL, long-term	inhalation	systemic	168 mg/m <sup>3</sup>
	Worker DNEL, long-term	inhalation	local	10 mg/m <sup>3</sup>
	Consumer DNEL, long-term	inhalation	systemic	50 mg/m <sup>3</sup>
	Consumer DNEL, long-term	inhalation	local	10 mg/m <sup>3</sup>
68424-85-1	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides			
	Worker DNEL, long-term	inhalation	systemic	3,96 mg/m <sup>3</sup>
	Worker DNEL, long-term	dermal	systemic	5,7 mg/kg bw/day
	Consumer DNEL, long-term	inhalation	systemic	1,64 mg/m <sup>3</sup>
	Consumer DNEL, long-term	dermal	systemic	3,4 mg/kg bw/day
	Consumer DNEL, long-term	oral	systemic	3,4 mg/kg bw/day

**SEILFLECHTER TANK U. LEITUNGSREINIGER Art.-Nr. 975112S**

Revision date: 06.04.2020

Page 5 of 11

**PNEC values**

CAS No	Substance	Value
Environmental compartment		
77-92-9	Citric acid	
Freshwater		0,44 mg/l
Marine water		0,044 mg/l
Freshwater sediment		34,6 mg/kg
Marine sediment		3,46 mg/kg
Micro-organisms in sewage treatment plants (STP)		1000 mg/l
Soil		33,1 mg/kg
57-55-6	Propane-1,2-diol	
Freshwater		260 mg/l
Freshwater (intermittent releases)		183 mg/l
Marine water		26 mg/l
Freshwater sediment		572 mg/kg
Marine sediment		57,2 mg/kg
Micro-organisms in sewage treatment plants (STP)		20000 mg/l
Soil		50 mg/kg
68424-85-1	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	
Freshwater		0,001 mg/l
Freshwater (intermittent releases)		0 mg/l
Marine water		0,001 mg/l
Freshwater sediment		12,27 mg/kg
Marine sediment		13,09 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,4 mg/l
Soil		7 mg/kg

**8.2. Exposure controls****Appropriate engineering controls**

Use only outdoors or in a well-ventilated area.  
Technical measures and the application of suitable work processes have priority over personal protection equipment.

**Protective and hygiene measures**

When using do not eat, drink, smoke, sniff.  
Wash hands before breaks and after work.  
Apply skin care products after work.  
Wash contaminated clothing prior to re-use.  
Only wear fitting, comfortable and clean protective clothing.  
Make available sufficient washing facilities  
Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

**Eye/face protection**

Wear eye protection/face protection. goggles

**Hand protection**

Suitable material: NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)  
Tested protective gloves must be worn: EN ISO 374 , acid-resistant  
Thickness of the glove material, Breakthrough times and swelling properties of the material must be taken into

**SEILFLECHTER TANK U. LEITUNGSREINIGER Art.-Nr. 975112S**

Revision date: 06.04.2020

Page 6 of 11

consideration. Observe the wear time limits as specified by the manufacturer.

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Check leak tightness/impermeability prior to use.

**Skin protection**

Wear suitable protective clothing.

**Respiratory protection**

Usually no personal respirative protection necessary.

Respiratory protection necessary at: exceeding exposure limit values

**Environmental exposure controls**

See section 7. No additional measures necessary.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	colourless
Odour:	characteristic

**Test method**

pH-Value (at 20 °C): 2,8

**Changes in the physical state**

Melting point:	No data available
Initial boiling point and boiling range:	>100 °C
Flash point:	not applicable
Sustaining combustion:	No data available

**Flammability**

Solid:	No data available
Gas:	not applicable

**Explosive properties**

not explosive according to EU A.14

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	No data available

**Auto-ignition temperature**

Solid:	not applicable
Gas:	not applicable

Decomposition temperature: not applicable

**Oxidizing properties**

Not oxidising.

Vapour pressure:	No data available
Density:	1,2 g/cm <sup>3</sup>
Water solubility:	completely miscible

**Solubility in other solvents**

No information available.

Partition coefficient: No data available

**SEILFLECHTER TANK U. LEITUNGSREINIGER Art.-Nr. 975112S**

Revision date: 06.04.2020

Page 7 of 11

Viscosity / dynamic:	No data available
Viscosity / kinematic:	No data available
Vapour density:	No data available
Evaporation rate:	No data available

**9.2. Other information**

No information available.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No information available.

**10.2. Chemical stability**

The product is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions**

No information available.

**10.4. Conditions to avoid**

Heat. UV-radiation/sunlight.

**10.5. Incompatible materials**

Oxidizing agent, Strong acid, Strong alkali

**10.6. Hazardous decomposition products**

In case of fire may be liberated: Pyrolysis products, toxic.

**Further information**

No information available.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

Based on available data, the classification criteria are not met.

Calculation method.

CAS No	Chemical name			
	Exposure route	Dose	Species	Source
77-92-9	Citric acid			
	oral	LD50 5400 mg/kg	Mouse	Study report (1981)
	dermal	LD50 > 2000 mg/kg	Rat	Study report (2006)
68424-85-1	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides			
	oral	LD50 795 mg/kg	Rat	Study report (1986)
	dermal	LD50 3412,5 mg/kg	Rabbit	Study report (1977)

**Irritation and corrosivity**

Causes skin irritation.

Causes serious eye irritation.

**Sensitising effects**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

### SEILFLECHTER TANK U. LEITUNGSREINIGER Art.-Nr. 975112S

Revision date: 06.04.2020

Page 8 of 11

#### 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.

#### Additional information on tests

No information available.

#### Practical experience

#### Observations relevant to classification

No information available.

#### Other observations

No information available.

#### Further information

There are no data available on the preparation/mixture itself.

## SECTION 12: Ecological information

### 12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h]   [d]	Species	Source
77-92-9	Citric acid				
	Acute fish toxicity	LC50 > 100 mg/l	96 h	Pimephales promelas	Photogr. Sci. Eng. 16(5):370-377 (1972)
	Acute crustacea toxicity	EC50 > 50 mg/l	48 h	other aquatic crustacea: Dreissena polymorpha	Environ.Toxicol.Chem. 16(9): 1930-1934 (
	Algea toxicity	NOEC 425 mg/l	8 d	Scenedesmus quadricauda	Water Research 14: 231-241 (1980)
68424-85-1	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides				
	Acute fish toxicity	LC50 0,85 mg/l	96 h	Oncorhynchus mykiss	Study report (1987)
	Acute algae toxicity	ErC50 0,03 mg/l	96 h	Pseudokirchneriella subcapitata	REACH Registration Dossier
	Acute crustacea toxicity	EC50 0,016 mg/l	48 h	Daphnia magna	REACH Registration Dossier
	Fish toxicity	NOEC 0,2737 mg/l	7 d	Pimephales promelas	REACH Registration Dossier
	Algea toxicity	NOEC >0,001-0,01 mg/l	72 d	Pseudokirchneriella subcapitata	
	Crustacea toxicity	NOEC 0,013 mg/l	21 d	Daphnia magna	REACH Registration Dossier
	Acute bacteria toxicity	(7,75 mg/l)	0,5 h	activated sludge of a predominantly domestic sewage	REACH Registration Dossier

### 12.2. Persistence and degradability

The product has not been tested.

### 12.3. Bioaccumulative potential



**SEILFLECHTER TANK U. LEITUNGSREINIGER Art.-Nr. 975112S**

Revision date: 06.04.2020

Page 9 of 11

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
77-92-9	Citric acid	-1,55
68424-85-1	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	1,01

**BCF**

CAS No	Chemical name	BCF	Species	Source
77-92-9	Citric acid	3,2		In: (2009)
68424-85-1	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	66,74	Lepomis macrochirus	REACH Registration D

**12.4. Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Other adverse effects**

No information available.

**Further information**

Avoid release to the environment.

The product is an acid. Before discharge into sewage plants the product normally needs to be neutralised.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Dispose of waste according to applicable legislation.

Hazardous waste according to Directive 2008/98/EC (waste framework directive).

AVV 20 01 29\*, 07 04 01\*

**Contaminated packaging**

Completely emptied packages can be recycled. Packing which cannot be properly cleaned must be disposed of. Dispose of waste according to applicable legislation.

**SECTION 14: Transport information****Land transport (ADR/RID)****14.1. UN number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)****14.1. UN number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)****14.1. UN number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

### SEILFLECHTER TANK U. LEITUNGSREINIGER Art.-Nr. 975112S

Revision date: 06.04.2020

Page 10 of 11

<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.
<b>Air transport (ICAO-TI/IATA-DGR)</b>	
<b>14.1. UN number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.
<b>14.5. Environmental hazards</b>	
ENVIRONMENTALLY HAZARDOUS:	no
<b>14.6. Special precautions for user</b>	No information available.
<b>14.7. Transport in bulk according to Annex II of Marpol and the IBC Code</b>	No information available.

## SECTION 15: Regulatory information

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

#### EU regulatory information

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

#### National regulatory information

Water hazard class (D): 2 - obviously hazardous to water  
Biocide registry number: N-89214

#### Additional information

Regulation (EU) No. 528/2012 on biocides  
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides 1,95 g je 100 g

### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

Citric acid  
Propane-1,2-diol  
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

## SECTION 16: Other information

### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
EC50: Effectice concentration, 50 percent  
DNEL: Derived No Effect Level  
PNEC: Predicted No Effect Concentration

### SEILFLECHTER TANK U. LEITUNGSREINIGER Art.-Nr. 975112S

Revision date: 06.04.2020

Page 11 of 11

PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

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

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

#### Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

---

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