

## Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

#### 1.1 Product identifier

### Felgenreiniger sauer Acid Rim Cleaner

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

##### Relevant identified uses of the substance or mixture:

Cleaner

##### Uses advised against:

No information available at present.

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

LIQUI MOLY GmbH  
Jerg-Wieland-Str. 4  
89081 Ulm-Lehr  
Tel.: (+49) 0731-1420-0  
Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

#### 1.4 Emergency telephone number

##### Emergency information services / official advisory body:

---

##### Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (LMR)  
+1 872 5888271 (LMR)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
STOT SE	3	H335-May cause respiratory irritation.
Eye Dam.	1	H318-Causes serious eye damage.
Met. Corr.	1	H290-May be corrosive to metals.
Skin Corr.	1	H314-Causes severe skin burns and eye damage.

#### 2.2 Label elements

##### Labeling according to Regulation (EC) 1272/2008 (CLP)

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revision date / version: 14.08.2023 / 0015  
 Replacing version dated / version: 13.03.2023 / 0014  
 Valid from: 14.08.2023  
 PDF print date: 15.08.2023  
 Felgenreiniger sauer  
 Acid Rim Cleaner



Danger

H335-May cause respiratory irritation. H290-May be corrosive to metals. H314-Causes severe skin burns and eye damage.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.

P260-Do not breathe vapours or spray. P271-Use only outdoors or in a well-ventilated area. P280-Wear protective gloves / protective clothing / eye protection / face protection.

P301+P330+P331-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. 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.

P405-Store locked up.

P501-Dispose of contents / container to an approved waste disposal facility.

Hydrochloric acid  
 2-Propylheptanol, ethoxylated

## 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

n.a.

### 3.2 Mixtures

Hydrochloric acid	Substance for which an EU exposure limit value applies.
Registration number (REACH)	01-2119484862-27-XXXX
Index	017-002-01-X
EINECS, ELINCS, NLP, REACH-IT List-No.	231-595-7
CAS	7647-01-0
content %	10-<25
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335
Specific Concentration Limits and ATE	Met. Corr. 1, H290: >=0,1 % Skin Corr. 1B, H314: >=25 % Skin Irrit. 2, H315: >=10 % Eye Irrit. 2, H319: >=10 % STOT SE 3, H335: >=10 %
2-Propylheptanol, ethoxylated	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	---

Page 3 of 14  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revision date / version: 14.08.2023 / 0015  
 Replacing version dated / version: 13.03.2023 / 0014  
 Valid from: 14.08.2023  
 PDF print date: 15.08.2023  
 Felgenreiniger sauer  
 Acid Rim Cleaner

<b>CAS</b>	160875-66-1
<b>content %</b>	1-<10
<b>Classification according to Regulation (EC) 1272/2008 (CLP), M-factors</b>	Acute Tox. 4, H302 Eye Dam. 1, H318
<b>Specific Concentration Limits and ATE</b>	Eye Dam. 1, H318: >10 %

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.  
 The substances named in this section are given with their actual, appropriate classification!  
 For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.  
 The addition of the highest concentrations listed here can result in a classification. Only when this classification is listed in Section 2 does it apply. In all other cases the total concentration is below the classification.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

First-aiders should ensure they are protected!  
 Never pour anything into the mouth of an unconscious person!

#### Inhalation

Remove person from danger area.  
 Supply person with fresh air and consult doctor according to symptoms.

#### Skin contact

Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.  
 Cauterizations not treated lead to wounds difficult to heal.

#### Eye contact

Remove contact lenses.  
 Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available.  
 Protect uninjured eye.  
 Follow-up examination by an ophthalmologist.

#### Ingestion

Rinse the mouth thoroughly with water.  
 Do not induce vomiting - give copious water to drink. Consult doctor immediately.

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

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.  
 In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.  
 Corrosive burns on skin as well as mucous membrane possible.

Necrosis  
 Risk of serious damage to eyes.  
 Danger of blindness.

Ingestion:  
 Pain in the mouth and throat  
 Oesophageal perforation  
 Gastric perforation

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

Symptomatic treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Water jet spray/foam/CO2/dry extinguisher

#### Unsuitable extinguishing media

High volume water jet

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

In case of fire the following can develop:

Oxides of carbon  
 Hydrogen chloride  
 Toxic gases

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
Revision date / version: 14.08.2023 / 0015  
Replacing version dated / version: 13.03.2023 / 0014  
Valid from: 14.08.2023  
PDF print date: 15.08.2023  
Felgenreiniger sauer  
Acid Rim Cleaner

### 5.3 Advice for firefighters

For personal protective equipment see Section 8.  
In case of fire and/or explosion do not breathe fumes.  
Protective respirator with independent air supply.  
According to size of fire  
Full protection, if necessary.  
Dispose of contaminated extinction water according to official regulations.

## SECTION 6: Accidental release measures

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

#### 6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.  
Ensure sufficient ventilation, remove sources of ignition.  
Avoid dust formation with solid or powder products.  
Leave the danger zone if possible, use existing emergency plans if necessary.  
Avoid contact with eyes or skin.  
If applicable, caution - risk of slipping.

#### 6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

### 6.2 Environmental precautions

If leakage occurs, dam up.  
Resolve leaks if this possible without risk.  
Prevent surface and ground-water infiltration, as well as ground penetration.  
Prevent from entering drainage system.  
If accidental entry into drainage system occurs, inform responsible authorities.

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

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.  
Neutralising is possible (only from a specialist).  
Diluting with water is possible.  
Flush residue using copious water.

### 6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

## SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

### 7.1 Precautions for safe handling

#### 7.1.1 General recommendations

Ensure good ventilation.  
Avoid inhalation of the vapours.  
Avoid contact with eyes or skin.  
Handle and open container with care.  
There should be an eyewash station and safety shower located near the area of use.  
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.  
Observe directions on label and instructions for use.  
Use working methods according to operating instructions.

#### 7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.  
Wash hands before breaks and at end of work.  
Keep away from food, drink and animal feedingstuffs.  
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

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

Keep out of access to unauthorised individuals.  
Not to be stored in gangways or stair wells.  
Store product closed and only in original packing.  
Do not use acid sensitive materials.

GB

Page 5 of 14  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revision date / version: 14.08.2023 / 0015  
 Replacing version dated / version: 13.03.2023 / 0014  
 Valid from: 14.08.2023  
 PDF print date: 15.08.2023  
 Felgenreiniger sauer  
 Acid Rim Cleaner

Acid-resistant floor necessary.  
 Do not store with alkalis.  
 Store at room temperature.  
 Store in a dry place.

### 7.3 Specific end use(s)

No information available at present.  
 Observe the instructions for good working practice and the recommendations for risk assessment.  
 Consult hazardous substance information systems, e.g. from the professional associations, the chemical industry or different industries, depending on the application (building materials, wood, chemistry, laboratory, leather, metal).

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Chemical Name	Hydrochloric acid		
WEL-TWA: HCl 1 ppm (2 mg/m <sup>3</sup> ) (gas and aerosol mists) (WEL), 5 ppm (8 mg/m <sup>3</sup> ) (EU)	WEL-STEL: HCl 5 ppm (8 mg/m <sup>3</sup> ) (gas and aerosol mists) (WEL), 10 ppm (15 mg/m <sup>3</sup> ) (EU)	---	
Monitoring procedures:	<ul style="list-style-type: none"> <li>- Draeger - Hydrochloric Acid 0,2/a (81 03 481)</li> <li>- Draeger - Hydrochloric Acid 1/a (CH 29 501)</li> <li>- Draeger - Hydrochloric Acid 50/a (67 28 181)</li> <li>- Compur - KITA-173 SA (548 980)</li> <li>- Compur - KITA-173 SB (548 998)</li> <li>- DFG (D), DFG (E) (Volatile inorganic acids) - 1997 - EU project</li> <li>- BC/CEN/ENTR/000/2002-16 card 93-1 (2004)</li> <li>- INSHT MTA/MA-019/A90 (Determination of inorganic acid anions in air)</li> <li>- OSHA ID-174SG (Hydrogen chloride in workplace atmospheresw) - 1986</li> </ul>		
BMGV: ---	Other information: ---		

Hydrochloric acid						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	36	µg/l	
	Environment - marine		PNEC	36	µg/l	
	Environment - water, sporadic (intermittent) release		PNEC	45	µg/l	
	Environment - sewage treatment plant		PNEC	36	µg/l	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	15	mg/m <sup>3</sup>	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	8	mg/m <sup>3</sup>	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).  
 (8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).  
 (8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.  
 \*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.  
 (13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Page 6 of 14  
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
Revision date / version: 14.08.2023 / 0015  
Replacing version dated / version: 13.03.2023 / 0014  
Valid from: 14.08.2023  
PDF print date: 15.08.2023  
Felgenreiniger sauer  
Acid Rim Cleaner

Ensure good ventilation. This can be achieved by local suction or general air extraction.  
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.  
Applies only if maximum permissible exposure values are listed here.  
Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.  
These are specified by e.g. EN 14042.  
EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

### 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.  
Wash hands before breaks and at end of work.  
Keep away from food, drink and animal feedingstuffs.  
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:  
Tight fitting protective goggles with side protection (EN 166).  
If applicable  
Face protection (EN 166).

Skin protection - Hand protection:  
Chemical resistant protective gloves (EN ISO 374).  
Recommended  
Protective gloves in butyl rubber (EN ISO 374).  
Minimum layer thickness in mm:  
> 0,5  
Permeation time (penetration time) in minutes:  
> 120  
The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.  
The recommended maximum wearing time is 50% of breakthrough time.  
Protective hand cream recommended.

Skin protection - Other:  
Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:  
If OES or MEL is exceeded.  
Filter E (EN 14387), code colour yellow  
Filter P2 (EN 143), code colour white  
Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:  
Not applicable

Additional information on hand protection - No tests have been performed.  
In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.  
Selection of materials derived from glove manufacturer's indications.  
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.  
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.  
In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.  
The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.3 Environmental exposure controls

No information available at present.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state: Liquid  
Colour: Red

Page 7 of 14  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revision date / version: 14.08.2023 / 0015  
 Replacing version dated / version: 13.03.2023 / 0014  
 Valid from: 14.08.2023  
 PDF print date: 15.08.2023  
 Felgenreiniger sauer  
 Acid Rim Cleaner

Odour:	Characteristic
Melting point/freezing point:	There is no information available on this parameter.
Boiling point or initial boiling point and boiling range:	There is no information available on this parameter.
Flammability:	There is no information available on this parameter.
Lower explosion limit:	There is no information available on this parameter.
Upper explosion limit:	There is no information available on this parameter.
Flash point:	There is no information available on this parameter.
Auto-ignition temperature:	There is no information available on this parameter.
Decomposition temperature:	There is no information available on this parameter.
pH:	0
Kinematic viscosity:	There is no information available on this parameter.
Solubility:	Soluble
Partition coefficient n-octanol/water (log value):	Does not apply to mixtures.
Vapour pressure:	There is no information available on this parameter.
Density and/or relative density:	1,09 g/ml
Relative vapour density:	There is no information available on this parameter.
Particle characteristics:	Does not apply to liquids.
<b>9.2 Other information</b>	
Corrosive to metals:	There is no information available on this parameter.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Product corrodes metals.

### 10.2 Chemical stability

Stable with proper storage and handling.

### 10.3 Possibility of hazardous reactions

Avoid contact with strong alkalis (exothermic reaction possible).

Avoid contact with certain metals e.g. aluminium (development of hydrogen gas possible).

### 10.4 Conditions to avoid

See also section 7.

None known

### 10.5 Incompatible materials

See also section 7.

Avoid contact with strong alkalis.

Avoid contact with strong oxidizing agents.

Avoid contact with certain metals e.g. aluminium.

Avoid contact with acid sensitive materials.

### 10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Possibly more information on health effects, see Section 2.1 (classification).

#### Felgenreiniger sauer Acid Rim Cleaner

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.





Page 9 of 14  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revision date / version: 14.08.2023 / 0015  
 Replacing version dated / version: 13.03.2023 / 0014  
 Valid from: 14.08.2023  
 PDF print date: 15.08.2023  
 Felgenreiniger sauer  
 Acid Rim Cleaner

12.2. Persistence and degradability:							The surfactant(s) contained in this mixture complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Endocrine disrupting properties:							Does not apply to mixtures.
12.7. Other adverse effects:							No information available on other adverse effects on the environment.
Other information:							DOC-elimination degree(complexing organic substance) $\geq$ 80%/28d: n.a.
Other information:	AOX				%		According to the recipe, contains no AOX.

Hydrochloric acid							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	7,45	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to fish:	LC50	96h	24,6	mg/l	Lepomis macrochirus		
12.1. Toxicity to daphnia:	EC50	48h	0,492	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	0,78	mg/l	Selenastrum capricornutum	OECD 201 (Alga, Growth Inhibition Test)	

Page 10 of 14  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revision date / version: 14.08.2023 / 0015  
 Replacing version dated / version: 13.03.2023 / 0014  
 Valid from: 14.08.2023  
 PDF print date: 15.08.2023  
 Felgenreiniger sauer  
 Acid Rim Cleaner

12.2. Persistence and degradability:							Inorganic products cannot be eliminated from water through biological purification methods.
12.3. Bioaccumulative potential:							Bioaccumulation is unlikely (LogPow < 1).
12.4. Mobility in soil:							Not to be expected
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

2-Propylheptanol, ethoxylated							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>10-100	mg/l	Oncorhynchus tshawytscha		Analogous conclusion
12.1. Toxicity to daphnia:	EC50	48h	>10-100	mg/l	Daphnia magna		Analogous conclusion
12.1. Toxicity to algae:	EC50	72h	10-100	mg/l	Scenedesmus subspicatus		Analogous conclusion
12.2. Persistence and degradability:	BOD	28d	>60	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.  
 Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)  
 07 06 01 aqueous washing liquids and mother liquors  
 20 01 29 detergents containing hazardous substances

Recommendation:

Sewage disposal shall be discouraged.  
 Pay attention to local and national official regulations.  
 E.g. dispose at suitable refuse site.  
 E.g. suitable incineration plant.

#### For contaminated packing material

Pay attention to local and national official regulations.  
 Empty container completely.  
 Uncontaminated packaging can be recycled.  
 Dispose of packaging that cannot be cleaned in the same manner as the substance.

## SECTION 14: Transport information

### General statements


#### Transport by road/by rail (ADR/RID)

14.1. UN number or ID number:

1789

Page 11 of 14  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revision date / version: 14.08.2023 / 0015  
 Replacing version dated / version: 13.03.2023 / 0014  
 Valid from: 14.08.2023  
 PDF print date: 15.08.2023  
 Felgenreiniger sauer  
 Acid Rim Cleaner

14.2. UN proper shipping name:  
 UN 1789 HYDROCHLORIC ACID, SOLUTION

14.3. Transport hazard class(es):	8	
14.4. Packing group:	II	
14.5. Environmental hazards:	Not applicable	
Tunnel restriction code:	E	
Classification code:	C1	
LQ:	1 L	
Transport category:	2	

**Transport by sea (IMDG-code)**

14.1. UN number or ID number: 1789

14.2. UN proper shipping name:  
 UN 1789 HYDROCHLORIC ACID, SOLUTION

14.3. Transport hazard class(es):	8	
14.4. Packing group:	II	
14.5. Environmental hazards:	Not applicable	
Marine Pollutant:	Not applicable	
EmS:	F-A, S-B	

**Transport by air (IATA)**

14.1. UN number or ID number: 1789

14.2. UN proper shipping name:  
 UN 1789 Hydrochloric acid solution

14.3. Transport hazard class(es):	8	
14.4. Packing group:	II	
14.5. Environmental hazards:	Not applicable	

**14.6. Special precautions for user**

Persons employed in transporting dangerous goods must be trained.  
 All persons involved in transporting must observe safety regulations.  
 Precautions must be taken to prevent damage.

**14.7. Maritime transport in bulk according to IMO instruments**

Freighted as packaged goods rather than in bulk, therefore not applicable.  
 Minimum amount regulations have not been taken into account.  
 Danger code and packing code on request.  
 Comply with special provisions.

**SECTION 15: Regulatory information**

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

Observe restrictions:  
 Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)!  
 Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): 0,4 %

**REGULATION (EC) No 648/2004**

5 % or over but less than 15 %  
 non-ionic surfactants  
 perfumes

National requirements/regulations on safety and health protection must be applied when using work equipment.

**15.2 Chemical safety assessment**

A chemical safety assessment is not provided for mixtures.

**SECTION 16: Other information**

Revised sections: 15  
 Employee training in handling dangerous goods is required.  
 These details refer to the product as it is delivered.  
 Employee instruction/training in handling hazardous materials is required.

Page 12 of 14  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revision date / version: 14.08.2023 / 0015  
 Replacing version dated / version: 13.03.2023 / 0014  
 Valid from: 14.08.2023  
 PDF print date: 15.08.2023  
 Felgenreiniger sauer  
 Acid Rim Cleaner

### Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
STOT SE 3, H335	Classification according to calculation procedure.
Eye Dam. 1, H318	Classification based on the pH value.
Met. Corr. 1, H290	Classification based on test data.
Skin Corr. 1, H314	Classification based on the pH value.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H302 Harmful if swallowed.  
 H314 Causes severe skin burns and eye damage.  
 H318 Causes serious eye damage.  
 H335 May cause respiratory irritation.

STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation  
 Eye Dam. — Serious eye damage  
 Met. Corr. — Substance or mixture corrosive to metals  
 Skin Corr. — Skin corrosion  
 Acute Tox. — Acute toxicity - oral

### Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.  
 Guidelines for the preparation of safety data sheets as amended (ECHA).  
 Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).  
 Safety data sheets for the constituent substances.  
 ECHA Homepage - Information about chemicals.  
 GESTIS Substance Database (Germany).  
 German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).  
 EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.  
 National Lists of Occupational Exposure Limits for each country as amended.  
 Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

### Any abbreviations and acronyms used in this document:

acc., acc. to according, according to  
 ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 AOX Adsorbable organic halogen compounds  
 approx. approximately  
 Art., Art. no. Article number  
 ASTM ASTM International (American Society for Testing and Materials)  
 ATE Acute Toxicity Estimate  
 BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)  
 BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)  
 BCF Bioconcentration factor  
 BSEF The International Bromine Council  
 bw body weight  
 CAS Chemical Abstracts Service  
 CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)  
 CMR carcinogenic, mutagenic, reproductive toxic  
 DMEL Derived Minimum Effect Level  
 DNEL Derived No Effect Level

Page 13 of 14  
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
 Revision date / version: 14.08.2023 / 0015  
 Replacing version dated / version: 13.03.2023 / 0014  
 Valid from: 14.08.2023  
 PDF print date: 15.08.2023  
 Felgenreiniger sauer  
 Acid Rim Cleaner

DOC Dissolved organic carbon  
 dw dry weight  
 e.g. for example (abbreviation of Latin 'exempli gratia'), for instance  
 EbCx, EyCx, EBLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)  
 EC European Community  
 ECHA European Chemicals Agency  
 ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect  
 EEC European Economic Community  
 EINECS European Inventory of Existing Commercial Chemical Substances  
 ELINCS European List of Notified Chemical Substances  
 EN European Norms  
 EPA United States Environmental Protection Agency (United States of America)  
 ErCx, EµCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)  
 etc. et cetera  
 EU European Union  
 EVAL Ethylene-vinyl alcohol copolymer  
 Fax. Fax number  
 gen. general  
 GHS Globally Harmonized System of Classification and Labelling of Chemicals  
 GWP Global warming potential  
 Koc Adsorption coefficient of organic carbon in the soil  
 Kow octanol-water partition coefficient  
 IARC International Agency for Research on Cancer  
 IATA International Air Transport Association  
 IBC (Code) International Bulk Chemical (Code)  
 IMDG-code International Maritime Code for Dangerous Goods  
 incl. including, inclusive  
 IUCLID International Uniform Chemical Information Database  
 IUPAC International Union for Pure Applied Chemistry  
 LC50 Lethal Concentration to 50 % of a test population  
 LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)  
 Log Koc Logarithm of adsorption coefficient of organic carbon in the soil  
 Log Kow, Log Pow Logarithm of octanol-water partition coefficient  
 LQ Limited Quantities  
 MARPOL International Convention for the Prevention of Marine Pollution from Ships  
 n.a. not applicable  
 n.av. not available  
 n.c. not checked  
 n.d.a. no data available  
 NIOSH National Institute for Occupational Safety and Health (USA)  
 NLP No-longer-Polymer  
 NOEC, NOEL No Observed Effect Concentration/Level  
 OECD Organisation for Economic Co-operation and Development  
 org. organic  
 OSHA Occupational Safety and Health Administration (USA)  
 PBT persistent, bioaccumulative and toxic  
 PE Polyethylene  
 PNEC Predicted No Effect Concentration  
 ppm parts per million  
 PVC Polyvinylchloride  
 REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)  
 REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.  
 RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)  
 SVHC Substances of Very High Concern  
 Tel. Telephone  
 TOC Total organic carbon  
 UN RTDG United Nations Recommendations on the Transport of Dangerous Goods  
 VOC Volatile organic compounds  
 vPvB very persistent and very bioaccumulative  
 wwt wet weight

Page 14 of 14  
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II  
Revision date / version: 14.08.2023 / 0015  
Replacing version dated / version: 13.03.2023 / 0014  
Valid from: 14.08.2023  
PDF print date: 15.08.2023  
Felgenreiniger sauer  
Acid Rim Cleaner

---

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

**Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90**

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.