



according to 29 CFR 1910.1200(g)

help:ex plaque f

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1. Identification

Product identifier

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Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Ready-for-use acid-based cleaning agent for easy removal of stubborn deposits such as plaque, tartar and denture adhesive from removable dental restorations.

Uses advised against

No information available.

Details of the supplier of the safety data sheet

Manufacturer

Company name: Renfert GmbH
Street: Untere Giesswiesen 2
Place: D-78247 Hilzingen
Telephone: +49 7731 8208-0
E-mail: info@renfert.com
Internet: www.renfert.com

Supplier

Company name:

Street:

Place:

Telephone:

E-mail:

Renfert USA
3718 Illinois Avenue
USA-60174 St. Charles IL
(001) 800336-7422
Bob@RenfertUSA.com

Contact person: Charlie Hagy Telephone: +1 (630) 5497380

E-mail: Charlie@RenfertUSA.com

Internet: www.renfert.com

Emergency phone number: USA: 800-222-1222 (National Poison Control number) | CA: British Columbia:

800-567-8911 or 604-682-5050 Alberta: 1-800-332-1414 or 944-1414 Saskatchewan: 1-866-454-1212 Manitoba: 1-855-776-4766 Ontario: 1-800-268-9017 Quebec: 1-800-463-5060 New Brunswick: 911 New Foundland: 1-866-727-1110 Northwest

Territories: 1-800-332-1414 Nova Scotia: 1-800-565-8161

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Corrosive to metals: Met. Corr. 1 Skin corrosion/irritation: Skin Corr. 1

Serious eye damage/eye irritation: Eye Dam. 1

Label elements

29 CFR Part 1910.1200

Signal word: Danger

Pictograms:

Hazard statements

May be corrosive to metals

Causes severe skin burns and eye damage

Precautionary statements

Wear protective gloves and eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

Absorb spillage to prevent material damage.

Additional advice on labelling

The classification is based on the pH value.

Hazards not otherwise classified





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This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

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

3. Composition/information on ingredients

Mixtures

Chemical characterization

Cleaning agent, acidic

Relevant ingredients

| CAS No | Components | Quantity |
|-----------|---------------------------|----------|
| 75-75-2 | methanesulphonic acid | 1 - 5 % |
| 7647-01-0 | hydrochloric acid | 1 - 5 % |
| 112-34-5 | 2-(2-butoxyethoxy)ethanol | 1 - 5 % |

4. First-aid measures

Description of first aid measures

General information

Take off immediately all contaminated clothing and wash it before reuse.

After inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

After contact with skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/or shower. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

After contact with eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

After ingestion

Rinse mouth. Do NOT induce vomiting. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage.

Indication of any immediate medical attention and special treatment needed

Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

Treat symptomatically

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Specific hazards arising from the chemical

Thermal decomposition can lead to the escape of irritating gases and vapors.

Special protective equipment and precautions for fire-fighters

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

Do not inhale explosion and combustion gases.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

General advice

Use personal protection equipment.

Provide adequate ventilation.

Environmental precautions

Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

Reference to other sections

Safe handling: see section 7

Personal protection equipment (PPE): see section 8

Disposal: see section 13



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7. Handling and storage

Precautions for safe handling

Advice on safe handling

Handle and open container with care.

Wear personal protection equipment (refer to section 8).

Avoid contact with skin, eyes and clothes.

Do not eat, drink or smoke when using this product.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately.

Wash hands before breaks and after work.

Avoid contact with eyes and skin.

Keep away from food, drink and animal feedingstuffs.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container in a cool, well-ventilated place.

Keep container tightly closed.

Hints on joint storage

Do not store together with: Alkali (lye)

Further information on storage conditions

Keep away from food, drink and animal feedingstuffs

8. Exposure controls/personal protection

Control parameters

Exposure limits

| CAS No | Substance | ppm | mg/m³ | Category | Origin |
|-----------|-------------------|-----|-------|----------|--------|
| 7647-01-0 | Hydrogen chloride | C 5 | C 7 | Ceiling | PEL |
| | | C 5 | C 7 | Ceiling | REL |

Exposure controls





Appropriate engineering controls

Safe handling: see section 7

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye protection/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

 $Suitable\ material:\ Butyl\ caoutchouc\ (butyl\ rubber),\ PVC\ (polyvinyl\ chloride),\ CR\ (polychloroprene,\ chloroprene\ rubber),$

FKM (fluoro rubber)

Thickness of the glove material: $0.5 \ \text{mm}$

Breakthrough time: >= 8 h

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. 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.

Skin protection

Wear suitable protective clothing.

Remove contaminated, saturated clothing immediately.

Respiratory protection

Provide adequate ventilation.

Respiratory protection necessary at: aerosol or mist formation

Environmental exposure controls

Do not allow to enter into surface water or drains.



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9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: Liquid Color: colorless Odor: characteristic

Melting point/freezing point: not determined Boiling point or initial boiling point and boiling > 100 °C

range:

Flammability: not applicable Lower explosion limits: not determined Upper explosion limits: not determined Flash point: not applicable Auto-ignition temperature: not determined Decomposition temperature: not determined pH-Value (at 20 °C): Viscosity / kinematic: not determined Water solubility: completely miscible Partition coefficient n-octanol/water: not determined Vapor pressure: 23 hPa

(at 20 °C)

Density (at 20 °C): 1,02 - 1,06 g/cm³ Relative vapour density: not determined

Other information

Information with regard to physical hazard classes

Explosive properties

not explosive according to EU A.14

Further Information

No further relevant information available

10. Stability and reactivity

Reactivity

No hazardous reaction when handled and stored according to provisions.

Chemical stability

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

Possibility of hazardous reactions

Violent reaction with: Alkali (lye) May be corrosive to metals.

Conditions to avoid

No special measures are necessary.

Incompatible materials

Violent reaction with: Alkali (lye) May be corrosive to metals.

Hazardous decomposition products

No known hazardous decomposition products

11. Toxicological information

Information on toxicological effects

Acute toxicity

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

ATEmix calculated

ATE (oral) > 5000 mg/kg; ATE (dermal) > 5000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

| CAS No | Components | Components | | | | | | | | |
|---------|-----------------------|-----------------------|--------|---------|--------|----------|--|--|--|--|
| | Exposure route | Dose | | Species | Source | Method | | | | |
| 75-75-2 | methanesulphonic acid | methanesulphonic acid | | | | | | | | |
| | oral | LD50 mg/kg | 1157,5 | Rat | ECHA | OECD 401 | | | | |
| | dermal | LD50 mg/kg | > 1000 | Rabbit | ECHA | OECD 402 | | | | |





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Irritation and corrosivity

Skin corrosion/irritation: Causes severe skin burns and eye damage (On basis of test data)

Serious eye damage/eye irritation: Causes serious eye damage (On basis of test data)

Sensitizing effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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.

Specific target organ toxicity (STOT) - single exposure

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

Specific target organ toxicity (STOT) - repeated exposure

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

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): Hydrochloric acid (CAS 7647-01-0) is listed in group 3.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

Aspiration hazard

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

Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Further information

The product has not been tested. The statement is derived from the properties of the single components.

To avoid risks to human health and the environment, comply with the instructions for use.

12. Ecological information

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

Persistence and degradability

The surfactant contained in this mixture complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

Bioaccumulative potential

There are no data available on the mixture itself.

Mobility in soil

There are no data available on the mixture itself.

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

Other adverse effects

No information available.

Further information

The product has not been tested. The statement is derived from the properties of the single components. Do not allow uncontrolled discharge of product into the environment.

To avoid risks to human health and the environment, comply with the instructions for use.

13. Disposal considerations

Waste treatment methods

Disposal recommendations

hazardous waste: Dispose of waste according to applicable legislation.

Consult the appropriate local waste disposal expert about waste disposal.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

14. Transport information





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U.S. DOT 49 CFR 172.101

UN number or ID number: UN 1760

Proper shipping name: corrosive liquids, n.o.s.

Transport hazard class(es):8Packing group:IIHazard label:8



Marine transport (IMDG)

UN 1760

UN proper shipping name: CORROSIVE LIQUID, N.O.S. (Alkylsulphonic acid and hydrochloric acid mixture)

Transport hazard class(es):8Packing group:IIHazard label:8



Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: UN 1760

<u>UN proper shipping name:</u> CORROSIVE LIQUID, N.O.S. (Alkylsulphonic acid and hydrochloric acid mixture)

Transport hazard class(es):8Packing group:IIHazard label:8



Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

Special precautions for user

Further information: see section 6, 7, 8

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

15. Regulatory information

U.S. Regulations

National regulatory information

SARA Section 304 CERCLA:

Hydrochloric acid (conc. < 37%) (7647-01-0): Reportable quantity = 5,000 (2270) lbs. (kg)

SARA Section 311/312 Hazards:

methanesulphonic acid (75-75-2): Immediate (acute) health hazard

Hydrochloric acid (conc. < 37%) (7647-01-0): Immediate (acute) health hazard

2-(2-butoxyethoxy)ethanol (112-34-5): Immediate (acute) health hazard

Clean Air Act Section 112(b):

Hydrochloric acid (conc. < 37%) (7647-01-0)

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

REGULATION (EU) 2024/590 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 7 February 2024 on substances that deplete the ozone layer, and repealing Regulation (EC) No 1005/2009: not applicable

REGULATION (EU) 2019/1021 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on persistent organic pollutants: not applicable

Regulation (EU) No. 649/2012 of the European parliament and of the council concerning the export and import of





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dangerous chemicals: not applicable

16. Other information

Hazardous Materials Identification System (HMIS)

Health: 3
Flammability: 0
Physical Hazard: 1
Personal Protection: B

Changes

Revision date: 07/22/2025

Revision No: 1,4

Abs. 2, 8, 11, 16 * Data changed compared with the previous version.

Abbreviations and acronyms

PBT: persistent and bioaccumulative and toxic vPvB: Very persistent and very bioaccumulative

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

ATE: Acute Toxicity Estimate LD50: lethal dose, 50% LC50: lethal concentration, 50%

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement concernant le transport international ferroviaire de marchandises Dangereuses (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

VOC: volatile organic compound(s)

Other data

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Restricted to professional users.

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