SAFETY DATA SHEET

In accordance with 1907/2006 annex II and 1272/2008
(All references to EU regulations and directives are abbreviated into only the numeric term)
Issued 2023-02-20
Version number 1.0

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

1.1. Product identifier

Trade name: LifeClean Sani A

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

Identified uses: Cleaning/washing agents

1.3. Details of the supplier of the safety data sheet

Company: LifeClean International AB
Kärranäsvägen 24
451 76 UDDEVALLA
Sweden
Telephone: 0522-104 04
E-mail: info@lifeclean.se
Website: www.lifeclean.se

1.4. Emergency telephone number

Phone number for emergencies: 999 or 112. The numbers are available 24/7.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Upon assessment, this mixture is not classified as hazardous according to 1272/2008

2.2. Label elements

Hazard pictogram: Not applicable
Signal word: Not applicable
Hazard statement: Not applicable

2.3. Other hazards

This product does not contain any substances that are assessed to be a PBT or a vPvB

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Note that the table shows known hazards of the ingredients in pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

Constituent	Classification	Concentration
HYDROCHLORIC ACID ... %		
CAS No: 7647-01-0 EC No: 231-595-7 Index No: 017-002-01-X	Skin Corr. 1B, STOT SE 3; H314, H335	<0.2 %
CHLORINE DIOXIDE ...%		
CAS No: 10049-04-4 EC No: 233-162-8 Index No: 017-026-01-0 REACH: 01-2119492305-37	Acute Tox. 3, Skin Corr. 1B, Aquatic Acute 1, M = 10; H301, H314, H400	<0.1 %

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

SECTION 4: First aid measures

4.1. Description of first aid measures

Generally

In case of concern, or if symptoms occur, call a doctor/physician.

Upon breathing in

Fresh air and rest. If symptoms persist seek medical advice.

Upon eye contact

Rinse the eye for several minutes with lukewarm water. If irritation persists call a doctor.
Remove contact lenses immediately if possible.

Upon skin contact

Normal washing of the skin is considered sufficient; If nevertheless symptoms do occur, contact a physician.

Upon ingestion

First rinse the mouth thoroughly with water and SPIT OUT the rinse water. Then drink at least half a litre of water and contact a doctor if complaints persist. DO NOT induce VOMITING.

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

Upon breathing in

Inhalation of heated product may cause airway irritation.

Upon eye contact

Splashes in eyes may cause burning pain.

Upon ingestion

Ingestion may cause discomfort or reduced general condition.

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

Symptomatic treatment.
When contacting a physician, take this SDS with you.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Extinguish with materials intended for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

The product is not flammable.
Gases detrimental to health can be spread in case of fire.

5.3. Advice for firefighters

Precautions according to standard procedures for chemical fires.
In case of fire use proper breathing apparatus.
Wear full protective clothing.
Protective measures should be taken regarding other material at the site of the fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep unauthorized and unprotected people at a safe distance.
Avoid inhalation and exposure to skin and eyes.
Use recommended safety equipment, see section 8.
Ensure good ventilation.
Note that there is a risk of slipping if product is leaking/spilling.

6.2. Environmental precautions

Avoid release to drains, soil or watercourses.
Please contact involved authorities if unintended release occurs.

6.3. Methods and material for containment and cleaning up

Smaller spills, clean up with cloth or similar and wash with water. For larger spills cover potential drains and wall in with absorbent inert material such as sand, dirt, vermiculite or diatomaceous earth.
Collect in appropriate containers.
Destruct according to the local directions.

6.4. Reference to other sections

See section 8 and 13 for personal protection equipment and disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Take the necessary preventive and protective measures for safe handling.
Avoid spillage, inhalation and contact with eyes and skin.
Work in order to avoid spillage. If spillage does occur, address it immediately in accordance with the directions specified in Section 6 of this safety data sheet.
Store this product separately from food items and keep it out of the reach of children and pets.
The usual precautions for handling chemicals should be observed.
Wash your hands after using the product.
Wash contaminated clothing before reuse.
Remove contaminated clothing.
Keep away from incompatible products.
Handle between 4 - 40 °C.
Use recommended safety equipment, see section 8.
Implement appropriate engineering controls if necessary, see Section 8.

7.2. Conditions for safe storage, including any incompatibilities

The product should be stored in a manner which prevents hazards to health and the environment. Avoid exposure to humans and animals and do not discharge the product in a sensitive environment.
Take the necessary preventive and protective measures for safe storage.
Keep out of reach for children.
Store separately from food and animal fodder, incl. utensils or surfaces which have been in contact with these things.
Store tightly, in original packaging.
Store in a ventilated space.
Must not be frozen.
Do not store in direct sunlight.
Do not store above normal room temperature.
Store in dry and cool area.
Do not store close to incompatible materials (see section 10.5).

7.3. Specific end use(s)

See identified uses in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National limit values

HYDROCHLORIC ACID ... %

United Kingdom (EH40/2005)

Time-weighted-average exposure limit (TWA) 1 ppm (mist) / 2 mg/m^3 (mist)
Short term exposure limit (STEL) 5 ppm (mist) / 8 mg/m^3 (mist)

CHLORINE DIOXIDE ...%

United Kingdom (EH40/2005)

Time-weighted-average exposure limit (TWA) 0.1 ppm / 0.28 mg/m^3
Short term exposure limit (STEL) 0.3 ppm / 0.84 mg/m^3

DNEL

HYDROCHLORIC ACID ... %

	Type of exposure	Route of exposure	Value
Worker	Acute Local	Inhalation	15 mg/m^3
Worker	Chronic Local	Inhalation	8 mg/m^3

PNEC

No data available.

8.2. Exposure controls

The risks posed by the product or its constituents must be considered in the task specific risk assessment, in accordance with current working environment legislation. The risk assessment should be reviewed regularly and updated if necessary.

8.2.1. Appropriate engineering controls

The ventilation in the workplace must ensure an air quality that meets the requirements of the current working environment legislation. Local exhaust ventilation should be used to remove airborne contaminants at the source.

Eye/face protection

Eye protection should be worn if there is any danger of direct exposure or splashing.

Skin protection

Wear suitable protective clothing when necessary.
Protective gloves are normally not needed due to the properties of this product, but may be necessary for other reasons, e.g. mechanical risks, temperature conditions or microbiological risks.
The most suitable protective glove should be chosen in consultation with the glove supplier, taking into account the risk assessment for the specific task and the properties of the chemicals involved. Note that the breakthrough time of the material is affected by the duration of the exposure, temperature conditions, abrasion, etcetera.

Respiratory protection

Respiratory protective equipment is not normally required when working with this product, given that adequate ventilation is provided.
The most appropriate respiratory protective equipment should be decided in consultation with the appointed safety representative, taking into account the risk assessment for the specific task.
Based on the physical and chemical properties of the product, the following filter type(s) and/or filter combination(s) are recommended:.
– B.

8.2.3. Environmental exposure controls

For limiting environmental exposure, see section 12.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Physical state	liquid Form: liquid
(b) Colour	Clear
(c) Odour	characteristic
(d) Melting point/freezing point	0 °C
(e) Boiling point or initial boiling point and boiling range	100 °C
(f) Flammability	Not indicated
(g) Lower and upper explosion limit	Not indicated
(h) Flash point	Not indicated
(i) Auto-ignition temperature	Not indicated
(j) Decomposition temperature	Not indicated
(k) pH	In working solution the pH value is: 2 - 3
(l) Kinematic viscosity	1 mm^2/s
(m) Solubility	Solubility in water: Soluble
(n) Partition coefficient n-octanol/water (log value)	Not indicated
(o) Vapour pressure	0.01 kPa
(p) Density and/or relative density	1 kg/L
(q) Relative vapour density	Not indicated
(r) Particle characteristics	Not indicated

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Not indicated

9.2.2. Other safety characteristics

Not indicated

SECTION 10: Stability and reactivity

10.1. Reactivity

Chlorine dioxide slowly decomposes in aqueous solution to, among other things, hydrochloric acid and chlorine gas.

10.2. Chemical stability

Chlorine dioxide slowly decomposes in aqueous solution to, among other things, hydrochloric acid and chlorine gas.

10.3. Possibility of hazardous reactions

No hazardous reactions known during normal use.

10.4. Conditions to avoid

Protect from heat and direct sunlight.
Avoid exposure to base metal materials for longer than necessary.
Avoid frost.

10.5. Incompatible materials

Avoid contact with alkaline products.
Avoid contact with sulfur compounds.
Avoid contact with oxidizers and reducing agents.

10.6. Hazardous decomposition products

Chlorine gas.
Chlorite.
Hydrochloric acid.

SECTION 11: Toxicological information

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

Information on possible health hazards are based on experience and / or toxicological properties of several components in the product.

Acute toxicity

The product is not classified as acutely toxic.

HYDROCHLORIC ACID ... %

LC50 rat 1h: 4.7 mg/l Inhalation
LD50 rat 24h: 900 mg/kg Orally

CHLORINE DIOXIDE ...%

LD50 rat 24h: 292 mg/kg Orally
LC50 rat 2h: 0.73 mg/L Inhalation

Skin corrosion/irritation

The product is not classified for skin corrosion/irritation.

Serious eye damage/irritation

The product is not classified for serious eye damage/eye irritation.

Respiratory or skin sensitisation

The product is not classified as sensitising.

Germ cell mutagenicity

The product is not classified as mutagen.

Carcinogenicity

The product is not classified as carcinogenic.

Reproductive toxicity

The product is not classified as a reproductive toxicant.

STOT-single exposure

The product is not classified for specific organ toxicity after single exposure.

STOT-repeated exposure

The product is not classified for specific organ toxicity after repeated exposure.

Aspiration hazard

The product is not classified as being toxic for aspiration.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

The product does not contain any substances identified as having endocrine disruptive properties in accordance with the criteria set out in (EU) 2017/2100 or (EU) 2018/605.

11.2.2. Other information

Not indicated.

SECTION 12: Ecological information

12.1. Toxicity

The product is not classified as hazardous to the environment.
Prevent release on land, in water and drains.

HYDROCHLORIC ACID ... %

EC50 Freshwater water flea (Daphnia magna) 48 h: > 56 mg/l
LC50 mosquitofish (Gambusia affinis) 96h: 232 mg/l

CHLORINE DIOXIDE ...%

LC50 fathead minnow (Pimephales promelas) 96h: 0.02 mg/L
EC50 Water flea (Daphnia pulex) 48h: 1.8 mg/L
IC50 Algae 72h: 1.31 mg/L

12.2. Persistence and degradability

The product degrades easily in the natural environment.

12.3. Bioaccumulative potential

This product or its constituents are not expected to accumulate in nature.

12.4. Mobility in soil

The product is miscible with water and is therefore variable in soil and water.

12.5. Results of PBT and vPvB assessment

This product does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Endocrine disrupting properties

The product does not contain any substances identified as having endocrine disruptive properties in accordance with the criteria set out in (EU) 2017/2100 or (EU) 2018/605.

12.7. Other adverse effects

Data lacking.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste handling of the product

The product is not classified as hazardous waste.
Empty, rinsed packaging is sent for recycling where practicable.
Avoid discharge into sewers.
See directive 2008/98/EC on waste. Observe national or regional provisions on waste management.

SECTION 14: Transport information

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

14.1. UN number or ID number

Not classified as dangerous goods

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

14.8 Other transport information

Not applicable

SECTION 15: Regulatory information

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

REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents.

15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: Other information

16a. Indication of where changes have been made to the previous version of the safety data sheet
Revisions of this document

This is the first version

16b. Legend to abbreviations and acronyms used in the safety data sheet
Full texts for Hazard Class and Category Code mentioned in section 3

Skin Corr. 1B	Skin corrosion/irritation, Hazard Category 1B - Skin Corr. 1B, H314 - Causes severe skin burns and eye damage
STOT SE 3	Specific target organ toxicity — Single exposure, Hazard Category 3, Respiratory tract irritation - STOT SE 3, H335 - May cause respiratory irritation
Acute Tox. 3	Acute toxicity (oral), Hazard Category 3 - Acute Tox. 3, H301 - Toxic if swallowed
Aquatic Acute 1, M = 10	Hazardous to the aquatic environment — Acute Hazard, Category 1 - Aquatic Acute 1, M = 10, H400 - Very toxic to aquatic life

Explanations of the abbreviations in Section 14

ADR	European Agreement concerning the International Transport of Dangerous Goods by Road
RID	Regulations concerning the International Transport of Dangerous Goods by Rail
IMDG	International Maritime Dangerous Goods Code
ICAO	International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)
IATA	The International Air Transport Association

16c. Key literature references and sources for data
Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I , as updated to 2023-02-20.
Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

1907/2006	REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
1272/2008	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
2008/98/EC	DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I , where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI .

16e. List of relevant hazard statements and/or precautionary statements
Full texts for hazard statements mentioned in section 3

H314 Causes severe skin burns and eye damage
H335 May cause respiratory irritation
H301 Toxic if swallowed
H400 Very toxic to aquatic life

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment
Warning for misuse

Not indicated.

Other relevant information

Not indicated

Editorial information

This material safety data sheet has been prepared and checked by KemRisk®, KemRisk Sweden AB, Platensgatan 8, SE-582 20 Linköping, Sweden, www.kemrisk.se