KALDEWEI

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006
(amended by Regulation (EU) 2015/830)

Disinfectant Kaldewei

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

1.1. Product identifier

Product code	279.826
Synonyms	CPID 539100

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

Use of the Substance/Mixture	[PT 02] Disinfectants and algaecides not intended for direct application to humans or animals. Whirl Pool bath Categories of users: professional AND private users.
Uses advised against	No further relevant information available

1.3. Details of the supplier of the safety data sheet

Company/Undertaking Identification	Switzerland: Franz Kaldewei AG Rohrerstrasse 100, CH - 5000 Aarau Tel.: +41 62 205 21 00 (8-17h) / Fax : +41 62 212 16 54 Info-desk: info.schweiz@kaldewei.com / www.kaldewei.ch Germany: Franz Kaldewei GmbH & Co. KG Beckumer Str. 33 – 35, D - 59229 Ahlen Tel.: +49 2382 785 0 / Fax: +49 2382 785 200 / info@kaldewei.de
1.4. Emergency telephone number	Tox Info Suisse: [24h/7d] Tel. 145 / +41 (0)44 251 51 51 - info@toxi.ch
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Version	1

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008	Skin corrosion/irritation, Cat. 1B, H314 Corrosive to metals, Cat. 1, H290 Hazardous to the aquatic environment, chronic, Cat. 1, H410
Additional information	For the full text of the phrases mentioned in this Section, see Section 16.

2.2. Label elements

Signal Word	Danger
Hazard Statements	H290: May be corrosive to metals. H314: Causes severe skin burns and eye damage. H410: Very toxic 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. P262: Do not get in eyes, on skin, or on clothing. P273: Avoid release to the environment. P302a: IF ON SKIN: wash off immediately with plenty of water. P305a: IF IN EYES: Rinse immediately with plenty of water, also under the eyelids. P501: Dispose of contents/ container to an approved waste disposal plant.
Supplemental information	None.
Product identifier	Alcohols, C9-11, ethoxylated, CAS-No. 68439-46-3
Contents of package < 125 ml	 Danger 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. P280: Wear protective gloves/ eye protection/ face protection.
Packaging	If available for privat use: Child resistant fastenings (EN 862). Tactile warning of danger (EN/ISO 11683).

2.3. Other hazards

No information available.

3. Composition/information on ingredients

Chemical characterization Aqueous solution; contains biocidal active substances
.

Components		CLP Classification	Product identifier
Alcohols, C9-11, ethoxylated	5% - 10%	Acute Tox. 4 H302, Eye Dam. 1 H318, Aquatic Acute 1 H400	CAS-No.: 68439-46-3
Ampholyt 20	1% - 3%	Acute Tox. 4 H302, Skin Corr. 1B H314, Aquatic Acute 1 H400	CAS-No.: 139734-65-9 EC-No.: ---
L-(+)-lactic acid	5% - 10%	Skin Irrit. 2 H315, Eye Dam. 1 H318	CAS-No.: 79-33-4 EC-No.: 201-196-2
ADBAC/BCK (C12-C16)	3% - 5%	Skin Corr. 1B H314, Acute Tox. 4 H312, Acute Tox. 4 H302, Aquatic Acute 1 H400	CAS-No.: 68424-85-1 EC-No.: 270-325-2
Cocamidopropyl betaine	1% - 3%	Skin Irrit. 2 H315, Eye Irrit. 2 H319, Aquatic Acute 1 H400	CAS-No.: 61789-40-0 EC-No.: 263-058-8
Acetic acid	0.1% - 1%	Skin Corr. 1A H314, Flam. Liq. 3 H226 [CSk1A: C ≥ 90 % ¦ CSk1B: 25 % ≤ C < 90 % ¦ CSk2: 10 % ≤ C < 25 % ¦ CEy2: 10 % ≤ C < 25 %]	CAS-No.: 64-19-7 EC-No.: 200-580-7 Index-No: 607-002-00-6
Citric acid	5% - 10%	Eye Irrit. 2 H319	CAS-No.: 5949-29-1 EC-No.: 201-069-1
Propan-2-ol	5% - 10%	Eye Irrit. 2 H319, STOT SE 3 H336, Flam. Liq. 2 H225	CAS-No.: 67-63-0 EC-No.: 200-661-7 Index-No: 603-117-00-0

For the full text of the phrases mentioned in this Section, see Section 16.

Hazardous impurities None known.

4. First aid measures

4.1. Description of first aid measures

Inhalation Move to fresh air. Consult a physician after significant exposure.

Skin contact Wash off with plenty of water. Remove contaminated clothing and shoes. Consult a physician for severe cases.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If easy to do, remove contact lens, if worn. Consult an ophthalmologist.

Ingestion Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed None known.

4.3. Indication of any immediate medical attention and special treatment needed	None known.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Water. Use dry chemical, CO2, water spray or alcohol foam.
Extinguishing media which must not be used for safety reasons	High volume water jet.
5.2. Special hazards arising from the substance or mixture	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. The product itself does not burn.

5.3. Advice for firefighters

Special protective equipment for firefighters	Standard procedure for chemical fires. In the event of fire, wear self-contained breathing apparatus.
Specific methods	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel	Use personal protective equipment. Avoid contact with skin and eyes. Do not breathe aerosol / mist.
Advice for emergency responders	Use personal protective equipment. Do not breathe aerosol / mist. In the case of vapour formation use a respirator with filter model .
6.2. Environmental precautions	Do not flush into surface water or sanitary sewer system.
6.3. Methods and material for containment and cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.
6.4. Reference to other sections	See chapter 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling	Wear personal protective equipment. Do not empty into drains. Avoid inhalation, ingestion and contact with skin and eyes. Use only in well-ventilated areas. Avoid formation of aerosol. Observe label precautions. Prepare the working solution as given on the label(s) and/or the user instructions.
7.2. Conditions for safe storage, including any incompatibilities	Keep out of the reach of children. Store in a place accessible by authorized persons only. Store in original container. Keep in a well-ventilated place. Keep tightly closed in a dry and cool place. May be corrosive to metals. Storage class (CH) 8B.
7.3. Specific end use(s)	Use only in accordance with our recommendations.

8. Exposure controls/personal protection

8.1. Control parameters

Exposure limit(s)	No data is available on the product itself.
Acetic acid (CAS 64-19-7)	
Switzerland - Occupational Exposure Limits - TWAs - (MAKs)	10 ppm TWA [MAK] 25 mg/m3 TWA [MAK]
Switzerland - Occupational Exposure Limits - STELs - (KZWs)	20 ppm STEL [KZW] 50 mg/m3 STEL [KZW]
Propan-2-ol (CAS 67-63-0)	
Switzerland - Occupational Exposure Limits - TWAs - (MAKs)	200 ppm TWA [MAK] 500 mg/m3 TWA [MAK]
Switzerland - Occupational Exposure Limits - STELs - (KZWs)	400 ppm STEL [KZW] 1000 mg/m3 STEL [KZW]
Switzerland - Biological Limit Values (BAT-Werte)	25 mg/L Medium: urine Time: end of shift Parameter: Acetone 25 mg/L Medium: whole blood Time: end of shift Parameter: Acetone

8.2. Exposure controls

Occupational exposure controls	Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. General industrial hygiene practice. Keep away from food and drink.
Personal protection equipment	
Respiratory protection	Not required; except in case of aerosol formation. In case of insufficient ventilation wear suitable respiratory equipment. Respirator with filter.
Hand protection	Protective gloves complying with EN 374. Gloves made of latex. Break through time: > 8 h.
Eye protection	Safety glasses with side-shields conforming to EN166. Eye wash bottle with pure water.
Skin and body protection	Long sleeved clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Thermal hazards	Do not heat the product.
Environmental exposure controls	Prevent leaks and prevent soil / water pollution caused by leaks. Bund storage facilities to prevent soil and water pollution in the event of spillage. Dispose of waste product or used containers according to local regulations.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid.
Colour	Light yellow.
Odour	Characteristic.
Odour Threshold	No information available.
pH:	6.5 ± 0.5
Melting point/range:	No information available.
Boiling point/range:	No information available.
Flash point:	does not flash
Evaporation Rate:	No information available.
Flammability:	No information available.
Explosion limits:	No information available.
Vapour pressure:	No information available.
Vapor density:	No information available.
Relative density:	1
Water solubility:	completely miscible
Partition coefficient (n-octanol/water):	No information available.
Autoignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	ca. 30 mPas
Combustion/explosion hazards:	none
Oxidizing properties:	none

9.2. Other information

General Product Characteristics	No information available.

10. Stability and reactivity

10.1. Reactivity	See section 10.3
10.2. Chemical stability	No decomposition if stored and applied as directed.
10.3. Possibility of hazardous reactions	No hazards to be specially mentioned.
10.4. Conditions to avoid	Heating in air. Do not freeze.
10.5. Incompatible materials	Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Corrodes base metals.

10.6. Hazardous decomposition products	None under normal use.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity	No data is available on the product itself. **Alcohols, C9-11, ethoxylated (CAS 68439-46-3)** Oral LD50 Rat = 1400 mg/kg (NZ_CCID) **L-(+)-lactic acid (CAS 79-33-4)** Dermal LD50 Rabbit > 2000 mg/kg (IUCLID) Oral LD50 Rat = 3730 mg/kg (IUCLID) **Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (CAS 68424-85-1)** Oral LD50 Rat = 426 mg/kg (NLM_CIP) **Cocamidopropyl betaine (CAS 61789-40-0)** Dermal LD50 Rabbit > 2000 mg/kg (OECD_SIDS) Oral LD50 Rat > 10000 mg/kg (OECD_SIDS) **Acetic acid (CAS 64-19-7)** Dermal LD50 Rabbit = 1060 mg/kg (JAPAN_GHS) Inhalation LC50 Rat = 11.4 mg/L 4 h(NLM_CIP) Oral LD50 Rat = 3310 mg/kg (JAPAN_GHS) **propan-2-ol; isopropyl alcohol; isopropanol (CAS 67-63-0)** Dermal LD50 Rabbit = 4059 mg/kg (JAPAN_GHS) Inhalation LC50 Rat = 72600 mg/m3 4 h(JAPAN_GHS) Oral LD50 Rat = 1870 mg/kg (JAPAN_GHS)
Skin corrosion/irritation	Causes severe burns.
Serious eye damage/eye irritation	Causes eye burns.
Respiratory / Skin Sensitisation	Negligible.
Carcinogenicity	Contains no ingredient listed as a carcinogen
Germ cell mutagenicity	Contains no ingredient listed as a mutagen.
Reproductive toxicity	Contains no ingredient listed as toxic to reproduction.
Specific target organ toxicity (single exposure)	No data available.
Specific target organ toxicity (repeated exposure)	No data available.
Aspiration hazard	No aspiration toxicity classification.
Human experience	No data is available on the product itself.
Symptoms related to the physical, chemical and toxicological characteristics	Causes severe burns. Risk of serious damage to eyes.

12. Ecological information

12.1. Toxicity	No data is available on the product itself.
Alcohols, C9-11, ethoxylated (CAS 68439-46-3)	
EU - Ecolabel (66/2010) - Detergent Ingredient Database - Anaerobic Degradation	Biodegradable under anaerobic conditions. (listed under Alcohol ethoxylate (C9-11, DID-no 021 >3-6 ethoxylated units, DID-no 022 >6-10 ethoxylated units) predominantly linear)
L-(+)-lactic acid (CAS 79-33-4)	
Ecotoxicity - Freshwater Fish - Acute Toxicity Data	96 h LC50 Brachydanio rerio: 320 mg/L [semi-static] (IUCLID) 96 h LC50 Lepomis macrochirus: 100 - 180 mg/L [static] (EPA) 96 h LC50 Oncorhynchus mykiss: 100 - 180 mg/L [static] (EPA)
Ecotoxicity - Water Flea - Acute Toxicity Data	48 h EC50 Daphnia magna: 240 mg/L (IUCLID) 48 h EC50 Daphnia magna: 180 - 320 mg/L [Static] (EPA)
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides (CAS 68424-85-1)	
EC50/48h/daphnia = 0.015 mg/l.	
Cocamidopropyl betaine (CAS 61789-40-0)	
Ecotoxicity - Freshwater Fish - Acute Toxicity Data	96 h LC50 Brachydanio rerio: 1.0 - 10.0 mg/L (IUCLID) 96 h LC50 Brachydanio rerio: 2 mg/L [semi-static] (IUCLID)
Ecotoxicity - Water Flea - Acute Toxicity Data	48 h EC50 Daphnia magna: 6.5 mg/L (IUCLID)
Ecotoxicity - Freshwater Algae - Acute Toxicity Data	72 h EC50 Desmodesmus subspicatus: 1.0 - 10.0 mg/L (IUCLID) 96 h EC50 Desmodesmus subspicatus: 0.55 mg/L (IUCLID)
Acetic acid (CAS 64-19-7)	
Ecotoxicity - Freshwater Fish - Acute Toxicity Data	96 h LC50 Pimephales promelas: 79 mg/L [static] (EPA) 96 h LC50 Lepomis macrochirus: 75 mg/L [static] (EPA)
Ecotoxicity - Water Flea - Acute Toxicity Data	48 h EC50 Daphnia magna: 65 mg/L [Static] (EPA)
Propan-2-ol (CAS 67-63-0)	
Ecotoxicity - Freshwater Fish - Acute Toxicity Data	96 h LC50 Pimephales promelas: 9640 mg/L [flow-through] (IUCLID) 96 h LC50 Pimephales promelas: 11130 mg/L [static] (IUCLID) 96 h LC50 Lepomis macrochirus: >1400000 µg/L (EPA)
Ecotoxicity - Water Flea - Acute Toxicity Data	48 h EC50 Daphnia magna: 13299 mg/L (IUCLID)
Ecotoxicity - Freshwater Algae - Acute Toxicity Data	96 h EC50 Desmodesmus subspicatus: >1000 mg/L (IUCLID) 72 h EC50 Desmodesmus subspicatus: >1000 mg/L (IUCLID)
12.2. Persistence and degradability	Surfactants contained comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.
12.3. Bioaccumulative potential	No data is available on the product itself.
12.4. Mobility in soil	No data is available on the product itself.
12.5. Results of PBT and vPvB assessment	This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
12.6. Other adverse effects	Water contaminating class (CH): A

13. Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products	Do not empty into drains. Do not put residues of product into household waste. It should be given in the original package to the official waste disposal authorities. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. The following Waste Codes are only suggestions: EWC waste disposal No: 07 04 99. Product rest to be treated as hazardous waste.
Contaminated packaging	Rinse empty containers with water and use the rinse water to prepare the working solution. Dispose of as unused product. Waste disposal number 15 01 02.

14. Transport information

ADR/RID	UN 1760. Proper shipping name: CORROSIVE LIQUID, N.O.S. (Quaternary ammonium compounds (QUATS)). Class 8. Packing group II. ADR/RID-Labels 8+ENV. Environmentally hazardous: Yes Classification code C9. Hazard identification no. 80. Limited quantity 1 L. Excepted quantity E2. Tunnel restriction code E
IMDG	UN 1760. Proper shipping name: CORROSIVE LIQUID, N.O.S. (Quaternary ammonium compounds (QUATS)). Class 8. Packing group II. IMDG-Labels 8+ENV. Limited quantity 1 L. Excepted quantity E2. EmS F-A, S-B. Marine pollutant: Yes.
IATA	UN 1760. Proper shipping name: Corrosive liquid, n.o.s. (Quaternary ammonium compounds (QUATS)). Class 8. Packing group II. IATA label 8+ENV. Packing instruction (passenger aircraft): 851 (1 L). Packing instruction (LQ): Y840 (0.5 L). Packing instruction (cargo aircraft): 855 (30 L).

Inland navigation ADN	UN 1760. Proper shipping name: CORROSIVE LIQUID, N.O.S. (Quaternary ammonium compounds (QUATS)). Class 8. Packing group II. ADN labels 8+ENV. Classification code C9. Limited quantity 1 L. Excepted quantity E2.
Further Information	Not classified as dangerous in the meaning of transport regulations.

15. Regulatory information

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

Regulatory Information	Tonnage treshold (CH): 2'000 kg. VOC (CH) = 5%
Acetic acid (CAS 64-19-7)	
Switzerland - Volatile Organic Compounds (VOCs)	2915.2100
Propan-2-ol (CAS 67-63-0)	
Switzerland - Volatile Organic Compounds (VOCs)	2905.1290
Biocidal product	CHZN4246 Active substance (s): Ampholyt 20 1.5 g/100g L-(+)-lactic acid 6 g/100g ADBAC/BCK (C12-C16) 4 g/100g
15.2. Chemical safety assessment	A Chemical Safety Assessment is not required.

16. Other information

Key or legend to abbreviations and acronyms	CPID: Chemical Product IDentification / Public-product-register [CH] CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS) MAK: Occupational exposure limit. VOC: Volatile organic compounds (VOC) content
Key literature references and sources for data	Information taken from reference works and the literature.
Classification procedure	Calculation method.
Full text of phrases referred to under sections 2 and 3	H225: Highly flammable liquid and vapour. H226: Flammable liquid and vapour. H290: May be corrosive to metals. H302: Harmful if swallowed. H312: Harmful in contact with skin. H314: Causes severe skin burns and eye damage. H315: Causes skin irritation. H318: Causes serious eye damage.

	H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects.
Training advice	Provide adequate information, instruction and training for operators.
Further information	See product description / Label.
Instructions for use	Dosage: 50 ml per 100 l of water / reaction time: 30-35 minutes / 1 x after bathing.
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification.