



SDS AquaClean

in accordance to Regulation (EC) no.: 1907/2006 (REACH) and 1272/2008 (CLP)

Date of issue/last revision: 07.2024

next revision: 07.2027

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

1.1. Product identifier:

Name: AquaClean
Cat. No.: WAK-AQ-250-50L

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

Additive to protect waterbaths and waterreservoirs in cell culture incubators from microbial contamination.

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

WAK-Chemie Medical GmbH
Siemensstr. 9
61449 Steinbach/Ts
Tel: +49 6171 2843 0
Fax: +49 6171 695 646
E-Mail: info@wak-chemie.com

1.4. Emergency phone: +49 6171 2843 0
(on weekdays during office hours, 9 am – 5 pm CET)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

2.1.1 Classification of the substance or mixture according to EC No 1272/2008:

Eye Irrit. 2 / H319
Skin Irrit. 2 / H315
Aquatic Acute 1 / H400
Aquatic Chronic 2 / H411

2.2. Label elements according to EC No 1272/2008

Hazard pictograms (CLP):

GHS07



GHS09



Signal Word: Warning
Hazard Statements: H319 Causes serious eye irritation.
H315 Causes skin irritation.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.



2.3 Other Hazards

The concentrate of AquaClean is classified as 'Very toxic to aquatic life'. The diluted working solution (1:200) is not 'harmful to aquatic life' and is appropriately diluted in order to be disposed via canalisation.

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Section 3: Composition/information on ingredients

3.1. Substance:

This product is a mixture.

3.2. Mixture:

Unique blend of quarternary ammonium compounds and auxiliary components.

Name	CAS Nr./ EU Nr.	Concentration	Classification according to EU Regulation 1272/2008 (CLP)		Reach-No.
Didecyldimethyl- ammoniumchloride	7173-51-5/ 230-525-2	< 5 % w/v	Acute Tox. 4 Skin Corr. 1B Eye Dam. 1 Aquatic Acute 1 Aquatic Chronic 2 M-Factor (acute): 10	H302 H314 H318 H400 H411	01-2119945987-15
C ₁₂ -C ₁₆ -alkyl- dimethylammonium- chloride	68424-85-1/ 270-325-2	< 5 % w/v	Acute Tox 4 Skin Corr. 1B Eye Dam. 1 Aquatic Acute 1 Aquatic Chronic M-Faktor (acute): 10 M-Faktor (chronic): 1	H302 H314 H318 H400 H410	01-2119965180-41

The phrases, symbols, categories, codings, hazard statements and precautionary statements of paragraph 3 respectively 16 only apply to the undiluted active ingredients. They do not apply to the solution at hand, AquaClean.

SVHC

This product does not contain any substances of very high concern (REACH Regulation (EC) No. 1907/2006, Article 57).

Section 4: First aid measures

4.1. Description of first aid measures:

General Instructions: Immediately remove clothing contaminated with the product.

After inhalation: Ensure fresh air, consult a doctor if you experience any symptoms.

After skin contact: Wash skin with water and soap. Consult a doctor if irritation persists.

After eye contact: Rinse eyes with flowing water for several minutes while keeping eyelids open. Consult a doctor if irritation persists.

After swallowing: Rinse mouth and drink plenty of water. Seek medical treatment.

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

No data available.

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

If medical condition worsens, consult a physician. Treat allergic reactions symptomatically.

Section 5: Firefighting measures



5.1. Extinguishing Media: Non-flammable. Suitable extinguishing media: CO₂, extinguishing powder, or water spray. Fight larger fires with water spray or alcohol-resistant foam. Unsuitable extinguishing media for safety reasons: Water in full jet.

5.2. Special hazards arising from the substance or mixture: In the event of fire, the following may be released: Nitrogen oxides (NO_x) Carbon monoxide (CO) Organic decomposition products.

5.3. Advice for firefighters:

Special protective equipment: See section 8.

Wear full protective suit and self-contained breathing apparatus.

Additional information: Collect contaminated extinguishing water separately, it must not enter the sewage system. Fire residues and contaminated extinguishing water must be disposed of in accordance with official regulations. Cool endangered containers in the vicinity with a water spray.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Wear protective equipment and keep unprotected persons away. Avoid contact with skin, eyes, and clothing.

6.2. Environmental precautions:

Prevent from entering surface waters. Dilute 1:200 and dispose via canalisation in accordance with local regulations.

6.3. Methods and material for containment and cleaning up: Pick up with liquid-binding material (sand, diatomaceous earth, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to section 13. Ensure adequate ventilation.

6.4. Reference to other sections: For information on safe handling, see section 7. For information on personal protective equipment, see section 8. For disposal information, see section 13.

Section 7: Handling and storage

7.1. Precautions for safe handling: Avoid contact with eyes and mucous membranes. Wear suitable protective equipment (safety goggles with side protection, chloroprene gloves). Do not inhale aerosols. Avoid prolonged or repeated contact with skin. Keep container tightly closed. Avoid aerosol formation. Notes on fire and explosion protection: No special measures required.

7.2. Conditions for safe storage, including any incompatibilities: Storage: Store protected from light at room temperature. Requirements for storage rooms and containers: Comply with laws and regulations for the storage and use of water-hazardous substances. Notes on joint storage: Not necessary. Further information on storage conditions: Keep container tightly closed. Protect from heat and direct sunlight.

7.3. Specific end use(s):

General Application:

AquaClean is indicated for application in waterbaths and waterreservoirs inside cell culture incubators. It protects the water within these containers from microbial contamination. The protection prevails for up to four weeks. The blue colour-indicator signals a beginning contamination by decolourization of the water.

Application in waterreservoirs inside cell culture incubators.

AquaClean is suited to be applied in the waterreservoirs inside cell culture incubators.

As the active ingredients of AquaClean are non-volatile there is no danger for the cell cultures stored inside the incubator to be invaded by the disinfectant via air.



Section 8: Exposure controls/personal protection

8.1. Control parameters: Active ingredients are non-volatile. Limitation and monitoring at the workplace are not required.

8.2. Exposure controls: Avoid contact with eyes and mucous membranes. Wear suitable protective equipment (safety goggles with side protection, chloroprene gloves). Do not inhale aerosols. Individual protection measures, such as personal protective equipment: General protective and hygienic measures: Keep away from food, beverages, and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with eyes and skin. Do not inhale vapors or spray mist. Respiratory protection: Not required with adequate ventilation.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

Appearance:	blue liquid
Odour:	odourless
Boiling point:	100° C
pH-value:	7,1
Specific weight:	0,99 +/- 0,01 g/cm ³
Solubility:	without limit in water
Flaming point:	non flammable
Oxidizing properties:	none
Vapour pressure:	~ H ₂ O
Chemical stability:	chemically stable
Water solubility:	without limit in water
n-octanol-water-partition-coefficient:	~ H ₂ O
Viscosity:	~ H ₂ O
Steam density:	~ H ₂ O
Evaporation rate:	~ H ₂ O

9.2. Other information:

Important information for health, environmental protection, and safety:

Ignition temperature: The product is not self-igniting.

Explosive properties: The product is not explosive.

Change in state evaporation rate: Not determined.

Section 10: Stability and reactivity

10.1. Reactivity: No decomposition if used according to specifications. No further relevant information available.

10.2. Chemical stability: The product is chemically stable. No decomposition if used according to specifications.

10.3. Possibility of hazardous reactions: No dangerous reactions known under normal conditions of storage and handling.

10.4. Conditions to avoid: Avoid temperatures above 35°C.

10.5. Incompatible materials: Not data available.

10.6. Hazardous decomposition products:

Thermal decomposition can produce various substances, whose exact composition depends on the decomposition conditions.

In case of fire, formation of carbon monoxide, carbon dioxide, and nitrogen oxides.



Section 11: Toxicological Information

11.1. Information on Toxicological Effects:

No adverse health effects are expected if used as intended.

Acute toxicity: Based on available data, the classification criteria are not met. Classification-relevant **LD/LC50 values:**

ATE (Acute Toxicity Estimate)

Oral LD50 5,307 mg/kg (rat)

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl-, chlorides

Oral LD50 398 mg/kg (rat) Dermal LD50 3,412 mg/kg (rabbit)

Didecyldimethylammonium chloride

Oral LD50 >300 - 2000 mg/kg (rat)

Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration hazard	No data available

Section 12: Ecological information

12.1. Toxicity:

Component: Didecyl dimethyl ammonium chloride

Ecotoxicological Data:

LC₅₀ 96 h fish: 0,48 mg/l

LC₅₀ 48 h daphnia: 0,03 mg/l

IC₅₀ 72 h alga: 0,01- 0,1 mg/l

Component: C₁₂-C₁₆-alkyl-dimethylammoniumchlorid

Ecotoxicological Data:

LC₅₀ 96 h fish: 0,85 mg/l

LC₅₀ 48 h daphnia magna: 0,015 mg/l

IC₅₀ 72 h alga: 0,03 mg/l

12.2. Persistence and degradability:

This product contains only readily biodegradable substances. The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

12.3. Bioaccumulative potential:

Not data available.

12.4. Mobility in soil:

Not data available.

12.5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.



12.6 Endocrine Disrupting Properties: The product does not contain substances with endocrine-disrupting properties.

12.7 Other Adverse Effects: Water hazard class 2 (self-classification): clearly hazardous to water according to the AwSV. Do not allow to enter groundwater or bodies of water. Do not discharge undiluted into the sewage system.

Section 13: Disposal considerations

13.1 Waste treatment methods:

13.1.1. Product/packaging disposal:

The product does not contain substances that are not degraded in sewage treatment plants.

The contained cationic compounds are biodegradable at high dilution. In the sewage system, they are adequately diluted and rendered ineffective by other wastewater components. Therefore, the working solution (dilution 1:200, 5 ml of AquaClean to 1 liter of water) can be disposed of via the sewage system in accordance with local regulations. In case of disposal of the concentrate, please dilute 1:200 prior to disposal via sewage system.

Recommendation: Do not dispose of together with household waste. Do not allow undiluted product to enter the sewage system.

Waste key number: Since January 1, 1999, waste key numbers are not only product-specific but essentially application-specific. The applicable waste key number can be found in the European Waste Catalogue.

Uncleaned packaging: Dispose of according to regulatory requirements.

Recommendation: Completely empty containers and clean them for reconditioning or recycling. Dispose of containers in accordance with local regulations.

Recommended cleaning agent: Water, possibly with the addition of detergents.

Section 14: Transport information

ADR/RID/AND/IMG/IATA:

14.1 UN number or ID number ADR, IMDG, IATA: UN 3082

14.2 Proper UN shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkylbenzyltrimethylammoniumchlorid, Didecyltrimethylammoniumchlorid)
IMDG: MARINE POLLUTANT IATA: Class 9: Environmentally hazardous

14.3 Transport hazard class(es) ADR: Class 9 UN 3082 IMDG, IATA: Class 9, UN ID 3082
Environmentally hazardous substance, liquid, n.o.s.

14.4 Packing group ADR, IMDG, IATA: III

14.5 Environmental hazards: The product contains environmentally hazardous substances:

Alkylbenzyltrimethylammonium chloride, Didecyltrimethylammonium chloride Marine pollutant: Symbol (fish and tree) Special marking (ADR): Symbol (fish and tree)

14.6 Special precautions for user Packaging provision: Y914 Maximum quantity for passenger and cargo aircraft as well as cargo-only aircraft: 450 liters

14.7 Transport in bulk according to IMO instruments: Not applicable. UN "Model Regulation": UN3082 (Alkylbenzyltrimethylammonium chloride, Didecyltrimethylammonium chloride), 9, III, ENVIRONMENTALLY HAZARDOUS



Section 15: Regulatory information

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

Labelling according EC No 1272/2008:

Eye Irrit. 2 / H319

Skin Irrit. 2 / H315

Aquatic Acute 1 / H400

Aquatic Chronic 2 / H411

15.2. Chemical safety assessment:

A chemical safety assessment is not required

Section 16: Other information

16.1 Indication of changes

See sections: 1, 3 and 16.

Composed by:	Dr. Florian Pobitschka
Date of issue/last revision:	07.2024
Next revision:	07.2027
Internal number:	L-02-002-02-0-06

16.2 Legend:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS: Chemical Abstracts Service

CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

IATA: International Air Transport Association

IATA-DGR: International Air Transport Association-Dangerous Goods Regulations

IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods Code

LC: Lethal Concentration

LD: Lethal Dose

LEV: Local Exhaust Ventilation

log Kow: Partition Coefficient between Octanol and Water

MARPOL: Maritime Pollution Convention = International Convention for the Prevention of Pollution from Ships

PBT: Persistent, Bioaccumulative, Toxic

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail (Règlement international concernant le transport des marchandises dangereuses par chemin de fer)

RPE: Respiratory Protective Equipment

SVHC: Substance of Very High Concern

TRGS: Technical Rules for Hazardous Substances (Technische Regeln für Gefahrstoffe, BAuA, Germany)

UN: United Nations

vPvB: Very Persistent and Very Bioaccumulative

Hazard Categories: Acute Tox. 4: Acute Toxicity – Category 4

Skin Corr. 1B: Skin Corrosion/Irritation – Category 1B

Skin Irrit. 2: Skin Irritation – Category 2

Eye Dam. 1: Serious Eye Damage/Eye Irritation – Category 1

Eye Irrit. 2: Eye Irritation – Category 2

Aquatic Acute 1: Hazardous to the Aquatic Environment - Acute Hazard – Category 1



Aquatic Chronic 1: Hazardous to the Aquatic Environment - Chronic Hazard – Category 1
Aquatic Chronic 2: Hazardous to the Aquatic Environment - Chronic Hazard – Category 2

16.3. References and data sources:

Regulation:

REACH- Regulation (EC) Nr. 1907/2006
CLP-Regulation (EC) Nr. 1272/2008
Regulation (EC) Nr. 2015/830

Internet:

www.reach-clp-biozid-helpdesk.de
<https://echa.europa.eu>
<http://www.reach-info.de>

16.4 Methods according to Article 9 of the Regulation (EC) No 1272/2008 of the evaluation of data for classification purposes:

Classification in accordance with Regulation (EC) No 1272/2008, Annex VII (Conversion table)

16.5. Hazard statements:

Acute Tox.	Acute toxicity
Skin Corr.	Skin corrosion
Aquatic Chronic	Chronic aquatic toxicity
Aquatic Acute	Acute aquatic toxicity
Eye Irrit.	Eye irritation
H302	May be harmful if swallowed
H312	Harmful in contact with skin
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
H411	Toxic to aquatic life with long-lasting effects
H412	Harmful to aquatic life with long-lasting effects

The phrases, symbols, categories, codings, hazard statements and precautionary statements of paragraph 3 respectively 16 only apply to the undiluted active ingredients. They do not apply to the solution at hand, AquaClean.

16.6 Training advice:

For activities with this mixture= no training required.

Legal Disclaimer:

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