



**CHLORHEIDINE
DIHYDROCHLORIDE
SOLUTION (1 MG/ML)
SAFETY DATA SHEET**

According to Regulation (EC) No. 1907/2006
GENERIC EU SDS - NO COUNTRY SPECIFIC OEL DATA

Date of Issue: 10-03-2026
Revision Number: A/0

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE
COMPANY/UNDERTAKING**

1.1 Product identifier

Product Identifier : Chlorhexidine Dihydrochloride Solution (1 mg/ml in water)
Product Number : C1502
CAS Number : [3697-42-5]
REACH Registration Number : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration, or the registration is envisaged for a later registration deadline.

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

Identified Uses : For research use only - restricted to professional users.
Uses Advised Against : Not for human or animal use

1.3 Details of the supplier of the safety data sheet

Company : Plant Biotechnologies
Seinhuiswachter 17-19
3034 KH Rotterdam The Netherlands
Phone Number : +31 10323 2002
E-mail Address : info.eu@toku-e.com
Safety Data Sheet Issued by : Plant Biotechnologies

1.4 Emergency telephone number

Emergency Phone Number (Internat.) : +1 (352) 353-3500 (INFOTRAC, 24-Hour Number)
Emergency Phone Number (US Only) : 1 (800) 535-5053 (INFOTRAC, 24-Hour Number)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

Hazardous to the aquatic environment, Acute (Category 1), H400

Hazardous to the aquatic environment, Chronic (Category 1), H410

For the full text of the H-Statements mentioned in this section, see Section 16.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard Pictogram(s):



Signal Word: Warning

Hazard Statement(s)

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

Precautionary Statement(s)

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with governmental regulation

Supplemental Hazard Information

No data available

2.3 Other hazards

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Synonym(s) : (1E)-2-[6-[[amino-[(E)-[amino-(4-chloroanilino)methylidene]amino]methylidene]amino]hexyl]-1-[amino-
Formula : $C_{22}H_{30}Cl_2N_{10} \cdot 2HCl$
Molecular weight : 578,4 g/mol

Hazardous ingredients according to Regulation (EC) No. 1272/2008

Hazardous ingredients according to Regulation (EC) No 1272/2008		
Component	Classification	Concentration
Chlorhexidine Dihydrochloride		
CAS Number [3697-42-5] EC Number [223-026-6]	Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	0,1 %
Water		
CAS Number [7732-18-5] EC Number [231-791-2]	/	99,9 %

For the full text of the H-Statements mentioned in this section, see Section 16.

SECTION 4: FIRST-AID MEASURES

4.1 Description of first-aid measures

General information

Consult a doctor/physician if exposed - additional medical care may be required. Show this safety data sheet to the medical provider.

If inhaled

If inhaled, move to fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash skin thoroughly with soap and water. Remove any contaminated clothing. Consult a physician.

In case of eye contact

Flush eye with water. After initial flush, remove any contact lenses and continue flushing for at least 15 minutes.

If swallowed

Rinse mouth with water. Immediately call a doctor, physician, or poison control center. Never give anything by mouth to an unconscious person.

Self-protection of the first aider

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent the spread of contamination.

4.2 Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: FIRE-FIGHTING MEASURES**5.1 Extinguishing media****Suitable extinguishing media**

Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

No data available

5.2 Special hazards arising from the substance or mixture**Hazardous Combustion Products**

Carbon and nitrogen oxides, hydrogen chloride

5.3 Advice for firefighters

Wear self-contained breathing apparatus if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed in Section 7 and 8. Use personal protective equipment. Avoid breathing dust, vapors, mist or gas. Avoid direct contact with spilled substances. Ensure adequate ventilation.

For personal protection see Section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous material.

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Refer to section 8 for exposure control and personal protection. Refer to section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes.

Avoid inhalation of vapor or mist.

For precautionary statements see section 2.2

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Protect from humidity.

Recommended storage temperature: -20 °C

Incompatibilities:

Not available

7.3 Specific end use(s)

Refer to section 1.2

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters:

No OEL data available

8.2 Exposure controls

Appropriate engineering controls:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling this product.

Personal Protective Equipment (PPE):

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the selected EN 374 derived from it.

Eye/Face protection

Wear eye protection. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Body protection

Wear protective clothing. The type of protective equipment must be selected according to the concentration of the dangerous substance at the specific work place.

Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	:	Solution
Odor	:	No data available
Odor Threshold	:	No data available
pH	:	No data available
Melting Point/Freezing Point	:	No data available
Initial Boiling Point and Range	:	No data available
Flash Point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper/Lower Flammability or		
Explosive Limits	:	No data available
Vapor Pressure	:	No data available
Vapor Density	:	No data available
Relative Density	:	No data available
Solubility(ies)	:	No data available
Partition Coefficient: n-octanol/water	:	No data available
Auto-Ignition Temperature	:	No data available
Decomposition Temperature	:	No data available
Viscosity	:	No data available
Explosive Properties	:	No data available
Oxidizing Properties	:	No data available

9.2 Other information

No additional information relevant to safe use of the substance.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Not available

10.6 Hazardous decomposition products

No data available

See Section 5 for hazardous combustion products.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity (active substance)

Subcutaneous LD₅₀ : Mouse : > 5000 mg/kg

Skin Corrosion/Irritation

No data available

Serious Eye Damage/ Eye Irritation

No data available

Respiratory or Skin Sensitization

No data available

Germ Cell Mutagenicity

No data available

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by the International Agency for Research on Cancer Monograph.

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

Additional Information

RTECS: XA5285000

Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Chlorhexidine diHCl is very toxic to aquatic life with long lasting effects. This mixture is classified as Aquatic Acute 1 (H400) and Aquatic Chronic 1 (H410). Avoid release to the environment.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not

12.6 Other adverse effects

Toxic/harmful to aquatic life (with long lasting effects)

In the absence of complete ecological information, treat product as environmentally
Use proper storage, handling, and disposal to prevent unintentional release into the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable products to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Avoid disposal of material in drains or sewers.

Waste material must be disposed of in accordance with the Directive on Waste 2008/98/EC as well as other national and local regulations.

Contaminated Packaging

Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

		ADR/RID	IMDG	IATA
14.1	UN Number	UN 3082	UN 3082	UN 3082
14.2	UN Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s. Chlorhexidine Dihydrochloride	Environmentally hazardous substance, liquid, n.o.s. Chlorhexidine Dihydrochloride	Environmentally hazardous substance, liquid, n.o.s. Chlorhexidine Dihydrochloride
14.3	Transport Hazard Class(es)	9	9	9
14.4	Packing Group	III	III	III
14.5	Environmental Hazards	Yes	Marine Pollutant: Yes	Yes

14.6 Special precautions for user

Further Information

When packaged in quantities of ≤ 30 mL per inner packaging and ≤ 1000 mL per outer packaging, this product may be transported as Dangerous Goods in Excepted Quantities (EQ, code E1) in accordance with ADR/RID, the IMDG Code and the IATA Dangerous Goods Regulations.

Standard packagings of 20 mL qualify for transport under the Excepted Quantities provisions. Packagings of 100 mL exceed the EQ inner packaging limit and must be shipped as fully regulated Dangerous Goods (UN3082, Class 9, Packing Group III).

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 and Annex II No. 2020/878

Authorizations and/or restrictions on use

Restricted to professional users.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H319 Causes serious eye irritation
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

Abbreviations and acronyms

ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Road (ADR) and Rail (RID)
CAS No: Chemical Abstracts Service number
EC: European Commission
EC No: European Commission number
EHS: Environmentally Hazardous Substance
EU: European Union
H-Statement: Hazard Statement
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IBC: International Bulk Chemical
IMDG: International Maritime Dangerous Goods Code
LC50: Lethal concentration, 50%
LD50: Median Lethal dose
MARPOL 73/78: International Convention for the Prevention of Pollution from Ships
NIOSH: National Institute for Occupation Safety and Health
OEL: Occupational Exposure Limit
PBT: Persistent, Bioaccumulative and Toxic
REACH: Registration, Evaluation, Authorisation and restrictions of Chemicals
RTECS: Registry of Toxic Effects of Chemical Substances
SDS: Safety Data Sheet
UN: United Nations
vPvB: Very Persistent and Very Bioaccumulative

Further information

Revision Date: 10-03-2026

The above information is based upon the present state of our knowledge and 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 is believed to be correct but does not purport to be all inclusive. It does not represent any guarantees of the properties of the product. TOKU-E Company shall not be held liable for damage or injury resulting from contact, handling, or storage of the above product.