

SAFETY DATA SHEET

Product Trade Name:
BaraCide W-960

Revision Date:
15-Sep-2022

Revision Number:
5

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Trade Name:

BaraCide W-960

Synonyms

None

Chemical Family

Not determined

Internal ID Code

HB000001

Recommended use and restrictions on use

Application

Biocide

Not for use in the United States CANNOT BE IMPORTED INTO THE UNITED STATES

Uses advised against

No information available

Manufacturer's Name and Contact Details

Manufacturer/Supplier

Halliburton Energy Services

14th Floor, CitiBank Tower, Al-Qutayat Street

Dubai, UAE

Telephone Number : +971 43036666

Additional Information

Prepared By

Chemical Stewardship

e-mail: fdunexchem@halliburton.com

Emergency Telephone Number

1-760-476-3959

Global Incident Response Access Code: 334305

Contract Number: 14012

2. HAZARDS IDENTIFICATION

Classification System

This SDS was prepared in accordance with United Nations "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)" and its revisions.

Classification

Acute Oral Toxicity	Category 4 - H302
Acute Toxicity - Dermal	Category 5 - H313
Skin Corrosion / Irritation	Category 1 - H314
Serious Eye Damage / Eye Irritation	Category 1 - H318

Specific Target Organ Toxicity - (Single Exposure)	Category 1 - H370
Acute Aquatic Toxicity	Category 1 - H400
Chronic Aquatic Toxicity	Category 1 - H410

Hazard Pictograms



Signal Word
Danger

Hazard Statements

- H302 - Harmful if swallowed
- H313 - May be harmful in contact with skin
- H314 - Causes severe skin burns and eye damage
- H318 - Causes serious eye damage
- H370 - Causes damage to organs
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention

- P260 - Do not breathe dust/fume/gas/mist/vapors/spray
- P264 - Wash face, hands and any exposed skin thoroughly after handling
- P270 - Do not eat, drink or smoke when using this product
- P273 - Avoid release to the environment
- P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response

- P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- P330 - Rinse mouth
- P312 - Call a POISON CENTER and doctor/physician if you feel unwell.
- P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
- P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P363 - Wash contaminated clothing before reuse
- P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P310 - Immediately call a POISON CENTER or doctor/physician
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P308 + P313 - IF exposed or concerned: Get medical advice/attention
- P391 - Collect spillage

Storage

- P405 - Store locked up

Disposal

- P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

Contains

Substances

- Didecyldimethylammonium chloride
- Ethane-1,2-diol

CAS Number

- 7173-51-5
- 107-21-1

Additional Information

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT (w/w)	GHS Classification
Didecyldimethylammonium chloride	7173-51-5	60 - 100%	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Acute Tox. 5 (H313) STOT SE 3 (H335) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Ethane-1,2-diol	107-21-1	10 - 30%	Acute Tox. 4 (H302) STOT SE 1 (H370)

4. FIRST AID MEASURES**First-aid Measures****Inhalation**

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Skin

In case of contact, immediately flush skin with plenty of soap and water for at least 30 minutes and remove contaminated clothing, shoes and leather goods immediately. Get medical attention immediately.

Eyes

In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Ingestion

Do NOT induce vomiting. Rinse mouth with water many times. Get medical attention, if symptoms occur

Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage. Harmful if swallowed. May cause damage to internal organs. Harmful in contact with skin.

Indication of any immediate medical attention and special treatment needed**Notes to Physician**

Not Applicable

5. FIRE FIGHTING MEASURES**Suitable Extinguishing Media**

Not determined

Extinguishing media which must not be used for safety reasons

Water spray jet

Specific hazards arising from the chemical

Decomposition in fire may produce harmful gases.

Special protective actions for fire-fighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Use appropriate protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Ensure adequate ventilation.

Environmental Precautions

Prevent from entering sewers, waterways, or low areas. Consult local authorities.

Methods and material for containment and cleaning up

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

Additional Information

See Section 8 and 13 for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling

Use appropriate protective equipment. Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Ensure adequate ventilation. Wash hands after use. Launder contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Store in original container. Store in a cool well ventilated area. Keep container closed when not in use. Store away from oxidizers. Store away from acids. Keep Away From Food

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Substances	CAS Number	United Arab Emirates	Bahrain	Kuwait	Gulf Cooperation Council
Didecyldimethylammonium chloride	7173-51-5	Not applicable	Not applicable	Not applicable	Not applicable
Ethane-1,2-diol	107-21-1	Not applicable	STEL: 25 ppm STEL: 45 mg/m ³	TWA: 125 mg/m ³ TWA: 50.0 ppm STEL: 100 mg/m ³	STEL: 25 ppm STEL: 45 mg/m ³

Appropriate engineering controls

Use in a well ventilated area.

Individual protection measures, such as personal protective equipment

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

Respiratory Protection

If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional.

Hand Protection

Nitrile gloves. Chemical-resistant protective gloves (EN 374) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

Skin Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron, rain jacket, pants or coverall, as appropriate, to prevent skin contact.

Eye Protection

Chemical goggles; also wear a face shield if splashing hazard exists.

Other Precautions

None known.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:

Liquid

Color

Light yellow

Odor:

Odorless

Odor Threshold:

No information available

pH:

6-7.5 (20C; 10 g/L)

Specific Gravity

0.94 (20 °C/68 °F)

Freezing Point/Range (°C):

No information available

Pour Point/Range (C):

No information available

Boiling Point/Range (C):

No information available

Flash Point/Range (°C):

> 100 °C

Flash Point Method:

No information available

Flammability Limits in Air - Lower (%):

No information available

Flammability Limits in Air - Upper (%):

No information available

Autoignition Temperature (°C):

No information available

Evaporation Rate (Butyl Acetate=1):

No information available

Vapor Pressure

No data available

Vapor Density (Air=1):

No information available

Water Solubility

Miscible with water

Decomposition Temperature (C):

No information available

Viscosity, Dynamic:

120-220 mPas @ 120-220°C

Viscosity, Kinematic:

No information available

Partition Coefficient/n-Octanol/Water:

No information available

Molecular Weight (g/mole):

No information available

10. STABILITY AND REACTIVITY

Reactivity

Not expected to be reactive.

Chemical Stability

Stable under normal conditions

Possibility of hazardous reactions

Will Not Occur

Conditions to Avoid

Excessive heat

Incompatible materials

Strong oxidizers. Strong acids. Strong alkalis.

Hazardous decomposition products

None known.

Additional Guidelines

Not Applicable

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Inhalation

Causes moderate respiratory irritation.

Eye Contact

Causes severe eye irritation which may damage tissue.

Skin Contact

Causes severe skin irritation with tissue destruction.

Ingestion

Harmful if swallowed. May cause kidney damage. May cause central nervous system effects.

Chronic Effects/Carcinogenicity

No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

LD50 Oral: 300.92 mg/kg

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Didecyldimethylammonium chloride	7173-51-5	329 mg/kg-bw (rat)	2930 mg/kg-bw (rabbit)	No data available
Ethane-1,2-diol	107-21-1	1400 mg/kg bw (Human)	9530 mg/kg (Rabbit)	> 2.5 mg/L (Rat, mist, 6h) (saturated concentration)

Substances	CAS Number	Skin corrosion/irritation
Didecyldimethylammonium chloride	7173-51-5	Skin, rabbit: Causes severe skin irritation with tissue destruction. Causes burns
Ethane-1,2-diol	107-21-1	Non-irritating to the skin (Rabbit)

Substances	CAS Number	Serious eye damage/irritation
Didecyldimethylammonium chloride	7173-51-5	Corrosive to eyes Causes severe irritation and or burns Eye, rabbit:
Ethane-1,2-diol	107-21-1	Non-irritating to the eye (Rabbit)

Substances	CAS Number	Skin Sensitization
Didecyldimethylammonium chloride	7173-51-5	Did not cause sensitization on laboratory animals (guinea pig)
Ethane-1,2-diol	107-21-1	Did not cause sensitization on laboratory animals (guinea pig) Patch test on human volunteers did not demonstrate sensitization properties

Substances	CAS Number	Respiratory Sensitization
Didecyldimethylammonium chloride	7173-51-5	No information available
Ethane-1,2-diol	107-21-1	No information available

Substances	CAS Number	Mutagenic Effects
Didecyldimethylammonium chloride	7173-51-5	In vivo tests did not show mutagenic effects. In vitro tests did not show mutagenic effects.
Ethane-1,2-diol	107-21-1	In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects.

Substances	CAS Number	Carcinogenic Effects
Didecyldimethylammonium chloride	7173-51-5	Did not show carcinogenic effects in animal experiments
Ethane-1,2-diol	107-21-1	Did not show carcinogenic effects in animal experiments

Substances	CAS Number	Reproductive toxicity
Didecyldimethylammonium chloride	7173-51-5	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.
Ethane-1,2-diol	107-21-1	Data are inconclusive or insufficient for classification. Fetotoxic and teratogenic effects observed in experimental animals at concentrations that did not produce maternal toxicity.

Substances	CAS Number	STOT - single exposure
Didecyldimethylammonium chloride	7173-51-5	May cause respiratory irritation.
Ethane-1,2-diol	107-21-1	May cause disorder and damage to the Kidney Central Nervous System (CNS) No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	STOT - repeated exposure
Didecyldimethylammonium chloride	7173-51-5	No data of sufficient quality are available. Not applicable due to corrosivity of the substance.
Ethane-1,2-diol	107-21-1	Not applicable No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	Aspiration hazard
Didecyldimethylammonium chloride	7173-51-5	Not applicable
Ethane-1,2-diol	107-21-1	No information available

12. ECOLOGICAL INFORMATION

Toxicity

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Didecyldimethylammonium chloride	7173-51-5	ErC50 (96 h) =0.053 mg/L (Pseudokirchnerella subcapitata)	LC50 (96 h) =0.97 mg/L (Danio rerio)	EC50 (3h) 17.95 mg/L (Activated sludge)	EC50 (48 h) =0.057 mg/L (Daphnia magna) NOEC (21 d) =0.021 mg/L (Daphnia magna)
Ethane-1,2-diol	107-21-1	EC50 (72h) 6500 - 13000 mg/L (Selenastrum capricornutum)	LC50 (96h) 72860 mg/L (Pimephales promelas) NOEC (7d) 15380 mg/L (Pimephales promelas)	No information available	EC50(48 hr)>100 mg/L (Daphnia magna) NOEC (7d) 8590 mg/L (Ceriodaphnia dubia)

Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Didecyldimethylammonium chloride	7173-51-5	Readily biodegradable (69% @ 28d)
Ethane-1,2-diol	107-21-1	Readily biodegradable (100% @ <4d)

Bioaccumulation potential

Substances	CAS Number	Bioaccumulation
Didecyldimethylammonium chloride	7173-51-5	-0.41 BCF = 2.1
Ethane-1,2-diol	107-21-1	LogKow-1.36

Mobility in soil

Substances	CAS Number	Mobility
Didecyldimethylammonium chloride	7173-51-5	KOC = >667
Ethane-1,2-diol	107-21-1	No information available

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods**Disposal methods**

Disposal should be made in accordance with federal, state, and local regulations. Substance should NOT be deposited into a sewage facility.

Contaminated Packaging

Follow all applicable national or local regulations.

Other Information

No information available

14. TRANSPORT INFORMATION**UN Number**

UN1760

UN proper shipping name:

Corrosive Liquid, N.O.S.
(Didecyldimethylammonium chloride)

Transport Hazard Class(es):

8

Packing Group:

II

Environmental Hazards:

Marine Pollutant

Special Precautions for User

None

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

Not applicable

15. REGULATORY INFORMATION**Regulatory Information:**

This SDS was prepared in accordance with United Nations "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)" and its revisions.

16. OTHER INFORMATION**Key literature references and sources for data**

www.ChemADVISOR.com/

Revision Date:

15-Sep-2022

Revision Note

SDS sections updated:

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End of Safety Data Sheet