

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	: BIOQUELL HYDROGEN PEROXIDE STERILANT-AQ
Other means of identification	: Not applicable
Recommended use	: Surface Disinfectant
Restrictions on use	: Reserved for industrial and professional use.
Product dilution information	: Product is sold ready to use.
Company	: Bioquell, Inc 702 Electronic Drive, Suite 200 19044 Horsham, USA (215) 682 0225 +1 215 682 0395 Bioquell.enquiries@ecolab.com
Emergency health information	: USA (Toll-Free): +1 866 519 4752. USA: +1 760 476 3962. Use access code: 333809
Issuing date	: 12/19/2024

SECTION 2. HAZARDS IDENTIFICATION
GHS Classification

Oxidizing liquids	: Category 2
Acute toxicity (Oral)	: Category 4
Acute toxicity (Inhalation)	: Category 4
Skin irritation	: Category 2
Serious eye damage	: Category 1
Specific target organ toxicity - single exposure	: Category 3 (Respiratory system)

GHS label elements

Hazard pictograms	: 
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Signal Word	: Danger
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Hazard Statements	: May intensify fire; oxidizer. Harmful if swallowed or if inhaled. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.
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Precautionary Statements	: Prevention: Keep away from heat. Keep/Store away from clothing/ combustible materials. Take any precaution to avoid mixing with combustibles. Avoid breathing mist or vapors. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection. Response:
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SAFETY DATA SHEET

BIOQUELL HYDROGEN PEROXIDE STERILANT-AQ

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. If skin irritation occurs: Get medical advice/ attention. Take off contaminated clothing and wash before reuse. In case of fire: Use water spray to extinguish.

Storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards : Do not mix with bleach or other chlorinated products – will cause chlorine gas.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical name	CAS-No.	Concentration (%)
Hydrogen peroxide	7722-84-1	30 - 60

SECTION 4. FIRST AID MEASURES

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Get medical attention if irritation develops and persists.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention.

Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water
Carbon dioxide (CO₂)

Unsuitable extinguishing media : Foam
Dry chemical

Specific hazards during fire fighting : Oxidizer. Contact with other material may cause fire.
On decomposition, releases oxygen which may intensify fire.

SAFETY DATA SHEET

BIOQUELL HYDROGEN PEROXIDE STERILANT-AQ

In case of a fire, if it is possible without risk, remove all containers exposed to the fire and store them in a safe place, away from any source of heat.

Cool closed containers exposed to fire with water spray.

- Hazardous combustion products : Decomposition products may include the following materials:
Carbon oxides
Oxygen
- Special protective equipment for fire-fighters : Use personal protective equipment.
- Specific extinguishing methods : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Move all flammable sources out of danger and keep them away from the scene. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water. DO NOT hermetically seal any defective containers, including drums (risk of bursting due to the decomposition of the product)
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. Isolate absorbed wastes contaminated with this product from other waste streams containing combustible materials (paper, wood fibers, cloth, etc.). Combustible materials exposed to this product should be rinsed immediately with large amounts of water to ensure that all product is removed. Residual product which is allowed to dry on organic materials such as rags, cloths, paper, fabrics, cotton, leather, wood, or other combustibles may spontaneously ignite and result in a fire.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not mix with bleach or other chlorinated products – will cause chlorine gas. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).
- Conditions for safe storage : Do not store on wooden pallets. Keep in a cool, well-ventilated place. Keep away from reducing agents. Keep away from combustible material. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers. Do not hermetically seal the container. Always transport and store the containers upright. Risk of overpressure and bursting in the event of decomposition in closed

SAFETY DATA SHEET

BIOQUELL HYDROGEN PEROXIDE STERILANT-AQ

containers and in pipes.

Storage temperature : 5 °C to 25 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Hydrogen peroxide	7722-84-1	TWA	1 ppm	ACGIH
		TWA	1 ppm 1.4 mg/m ³	NIOSH REL
		TWA	1 ppm 1.4 mg/m ³	OSHA Z1

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Wear eye protection and/or face protection.

Hand protection : Wear the following personal protective equipment:
Standard glove type.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : No special protective equipment required.

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : clear, colorless

Odor : odorless

pH : 1.5 - 3.5, (100 %)

Flash point : Not applicable

Odor Threshold : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling range : No data available

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

SAFETY DATA SHEET

BIOQUELL HYDROGEN PEROXIDE STERILANT-AQ

Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: 1.1 - 1.2
Water solubility	: soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: log Pow: -1.57Method: Calculated
Autoignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, kinematic	: 0.692 mm ² /s (40 °C)
Explosive properties	: No data available
Oxidizing properties	: yes
Molecular weight	: No data available
VOC	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Decomposes on heating. Potential for exothermic hazard.
Chemical stability	: Decomposes on heating. Contamination may result in dangerous pressure increases - closed containers may rupture.
Possibility of hazardous reactions	: Do not mix with bleach or other chlorinated products – will cause chlorine gas.
Conditions to avoid	: Freezing temperatures. Heat. Exposure to sunlight.
Incompatible materials	: Bases Reducing agents Organic materials Strong oxidizing agents Strong acids Metals Reducing agents Flammable materials
Hazardous decomposition products	: In the event of fire, see Section 5

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	: Inhalation, Eye contact, Skin contact
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Potential Health Effects

SAFETY DATA SHEET

BIOQUELL HYDROGEN PEROXIDE STERILANT-AQ

Eyes	: Causes serious eye damage.
Skin	: Causes skin irritation.
Ingestion	: Harmful if swallowed.
Inhalation	: May cause respiratory tract irritation. Harmful if inhaled. May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Irritation
Ingestion	: No information available.
Inhalation	: Respiratory irritation, Cough

Toxicity

Product

Acute oral toxicity	: Acute toxicity estimate : 1,389 mg/kg
Acute inhalation toxicity	: 4 h Acute toxicity estimate : 2 mg/l Test atmosphere: dust/mist
Acute dermal toxicity	: No data available
Skin corrosion/irritation	: No data available
Serious eye damage/eye irritation	: No data available
Respiratory or skin sensitization	: No data available
Carcinogenicity	: No data available
Reproductive effects	: No data available
Germ cell mutagenicity	: No data available
Teratogenicity	: No data available
STOT-single exposure	: No data available
STOT-repeated exposure	: No data available
Aspiration toxicity	: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects	: Toxic to aquatic life. Harmful to aquatic life with long lasting effects.
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Product

Toxicity to fish	: No data available
Toxicity to daphnia and other aquatic invertebrates	: No data available

SAFETY DATA SHEET

BIOQUELL HYDROGEN PEROXIDE STERILANT-AQ

Toxicity to algae : No data available

Components

Toxicity to fish : Hydrogen peroxide
96 h LC50 Pimephales promelas: 16.4 mg/l

Components

Toxicity to algae : Hydrogen peroxide
72 h EC50 Skeletonema costatum (marine diatom): 1.38 mg/l

Persistence and degradability

Not applicable - inorganic

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Do not contaminate ponds, waterways or ditches with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

RCRA - Resource Conservation and Recovery Authorization Act Hazardous waste : D002 (Corrosive)

SECTION 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

UN number : 2014
Description of the goods : Hydrogen peroxide, aqueous solutions
Class : 5.1 (8)
Packing group : II
Environmentally hazardous : no

Sea transport (IMDG/IMO)

UN number : 2014
Proper shipping name : HYDROGEN PEROXIDE, AQUEOUS SOLUTION

SAFETY DATA SHEET

BIOQUELL HYDROGEN PEROXIDE STERILANT-AQ

Class : 5.1 (8)
Packing group : II
Marine pollutant : no

SECTION 15. REGULATORY INFORMATION

EPA Registration number : 1677-277

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Oxidizer (liquid, solid or gas)
Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 302 : The following components are subject to reporting levels established by SARA Title III, Section 302:
Hydrogen peroxide 7722-84-1 30 - 50 %

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

California Cleaning Product Right to Know Act of 2017 (SB 258)

This regulation applies to this product.

Hazardous ingredients	CAS-No.	Function	List(s)
water	7732-18-5	Solvent	Not Applicable
Hydrogen peroxide	7722-84-1	Biocide	Not Applicable

*refer to ecolab.com/sds for electronic links to designated lists

The ingredients of this product are reported in the following inventories:

United States TSCA Inventory :

All substances listed as active on the TSCA inventory

Canadian Domestic Substances List (DSL) :

All components of this product are on the Canadian DSL

Australia. Australian Industrial Chemicals Introduction Scheme (AICIS) :

On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemical Substances :

not determined

Japan. ENCS - Existing and New Chemical Substances Inventory :

SAFETY DATA SHEET

BIOQUELL HYDROGEN PEROXIDE STERILANT-AQ

On the inventory, or in compliance with the inventory

Korea. Korean Existing Chemicals Inventory (KECI) :

On the inventory, or in compliance with the inventory

Philippines Inventory of Chemicals and Chemical Substances (PICCS) :

On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances in China (IECSC) :

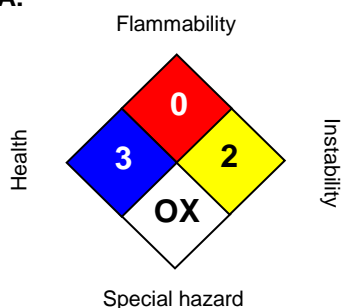
On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI) :

On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	2

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

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Version : 1.4
Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

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 and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.