

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	BIOQUELL HYDROGEN PEROXIDE STERILANT
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.consumables@ecolab.com
Emergency health information	:	USA (Toll-Free): +1 866 519 4752. USA: +1 760 476 3962. Use access code: 333809
Issuing date	:	05/10/2022
SECTION 2. HAZARDS IDEN	ITIF	FICATION

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 -	:	Category 3 (Respiratory system)
single exposure		

GHS label elements

Hazard pictograms	
Signal Word	Danger
Hazard Statements	May intensify fire; oxidizer. Harmful if swallowed or if inhaled. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.
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. Wear protective gloves/ eye protection/ face protection. Response: 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	:	None known.
SECTION 3. COMPOSITION/	INF	ORMATION ON INGREDIENTS
Pure substance/mixture	:	Mixture
Chemical name Hydrogen peroxide		CAS-No.Concentration (%)7722-84-130 - 60
SECTION 4. FIRST AID MEAS	SU	ES
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	ME	ASURES
Suitable extinguishing media	:	Water
Unsuitable extinguishing media	:	Dry chemical Carbon dioxide (CO2) Foam

Specific hazards during fire : Oxidizer. Contact with other material may cause fire.

Hazardous combustion : Decomposition products may include the following materials:

fighting

products	en	
Special protective equipment for fire-fighters	personal protective equi	oment.
Specific extinguishing methods	e discharged into drains guishing water must be o	nguishing water separately. This must . Fire residues and contaminated fire disposed of in accordance with local re 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. Refer to protective measures listed in sections 7 and 8. Eliminate any possible source of ignition.
Environmental precautions	:	Do not allow contact with soil, surface or ground water.
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. 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 away from reducing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers. Keep in the original container only, in a cool and well-ventilated place, out of the light and away from combustible materials and reducing agents (amines), acids, bases, heavy metal compounds (accelerators, siccative agents, metallic salts).
Storage temperature	:	5 °C to 25 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Form of	Permissible	Basis
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SAFETY DATA SHEET

BIOQUELL HYDROGEN PEROXIDE STERILANT

		exposure	concentration	
Hydrogen peroxide	7722-84-1	TWA	1 ppm	ACGIH
		TWA	1 ppm 1.4 mg/m3	NIOSH REL
		TWA	1 ppm 1.4 mg/m3	OSHA Z-1

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
рН	: 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	: >100 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: Not applicable
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	: 0.980 mm2/s (40 °C)
Explosive properties	: No data available
Oxidizing properties	: The substance or mixture is classified as oxidizing with the category 2.
Molecular weight	: No data available
VOC	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	No dangerous reaction known under conditions of normal use.		
Chemical stability	Contamination may result in dangerous pressure increases - closed containers may rupture.		
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.		
Conditions to avoid	Freezing temperatures. Heat. Exposure to sunlight.		
Incompatible materials	Strong oxidizing agents Organic materials Strong acids Bases Reducing agents Metals Combustible material Heavy metal salts		
Hazardous decomposition products	In case of fire hazardous decomposition products may be produced such as: Oxygen		

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	Inhalation, Eye contact, Skin contact		
Potential Health Effects			
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.		
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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.
Product		
Toxicity to fish	:	No data available
Toxicity to daphnia and other aquatic invertebrates	:	No data available
Toxicity to algae	:	No data available
Components		
Toxicity to fish	:	Hydrogen peroxide 96 h LC50 Pimephales promelas: 16.4 mg/l
Components		
Toxicity to daphnia and other aquatic invertebrates	:	Hydrogen peroxide 48 h LC50 Daphnia magna (Water flea): 2.4 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 reuse empty containers. Dispose of in accordance with local, state, and federal regulations. **RCRA - Resource** : D002 (Corrosive)

Conservation and Recovery Authorization Act Hazardous waste

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 Description of the goods Class Packing group Environmentally hazardous Sea transport (IMDG/IMO)	 2014 Hydrogen peroxide, aqueous solutions 5.1 (8) II no
UN number Proper shipping name Class Packing group Marine pollutant	: 2014 : HYDROGEN PEROXIDE, AQUEOUS SOLUTION : 5.1 (8) : II : no
Self-Accelerating decomposition temperature	: 60 °C

(SADT)

SECTION 15. REGULATORY INFORMATION

EPA Registration number : 72372-1-86703

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 co CAS numbers that excee established by SARA Tit	ed the threshold (De Min	

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.

Chemical Name	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			

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 :

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) :

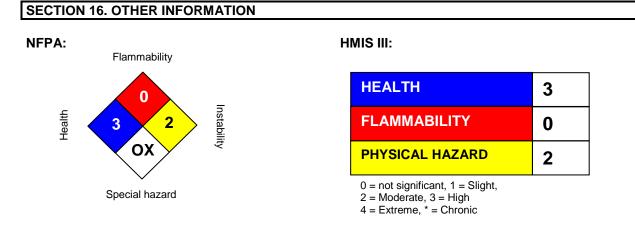
On the inventory, or in compliance with the inventory

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



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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.