

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : ViveSecure 100
EPA Registration # : 63761-8

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Disinfectant

1.3. Supplier

Manufacturer

Sterilex LLC
111 Lake Front Dr
Hunt Valley, MD 21030 - USA
T 443-541-8800

1.4. Emergency telephone number

Emergency number : ChemTel LLC (800)255-3924 (North America); +1 (813)248-0585 (International)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS classification

Acute toxicity (oral), Category 4
Skin corrosion/irritation, Category 2
Serious eye damage/eye irritation, Category 1

2.2. GHS Label elements, including precautionary statements

GHS labelling

Hazard pictograms (GHS) :



Signal word (GHS) :

Danger

Hazard statements (GHS) :

H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.

Precautionary statements (GHS) :

P264 - Wash face, hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product
P280 - Wear eye protection, face protection, protective clothing, protective gloves.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P330 - Rinse mouth.
P302+P352 - If on skin: Wash with plenty of water.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P310 - Immediately call a poison center or doctor.

P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%
Hydrogen peroxide	Hydrogen peroxide (H ₂ O ₂) / HYDROGEN PEROXIDE / Hydrogen peroxide, aqueous solution / Dihydrogen dioxide / Hydrogen peroxide solution ...% / Aqueous solution of hydrogen peroxide / Hydrogen peroxide solution / hydrogen peroxide	CAS-No.: 7722-84-1	5 – 10
Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	Benzyl-C12-18-alkyldimethylammonium chloride / Dimethylalkyl(C12-18)benzylammonium chloride / SDA 16-052-00 / Alkyl(C12-18)benzyl dimethylammonium chloride / n-Alkyl(C12-18)benzyl dimethylammonium chloride / Alkyl (C12-18) dimethylbenzyl ammonium chloride / N-Alkyl-dimethyl benzyl ammonium chloride / Alkyl(C12-18) benzyl dimethylammonium chloride / Alkyl (C12-18) dimethylbenzylammonium chloride / Benzyl-C12-18-alkyldimethyl, chlorides / N-Alkyl dimethyl benzyl ammonium chloride (C12-18) / Alkyl(C12-18)dimethylbenzyl ammonium chloride / C12-18 Alkyl benzyl dimethyl ammonium chloride	CAS-No.: 68391-01-5	1 – 5
Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	Alkyl(C12-14)dimethyl(ethylbenzyl)ammonium chloride / Quaternary ammonium compounds, n-alkyl(C12-14) dimethyl ethylbenzyl ammonium chloride / Alkyl (C12-14) ethylbenzyl ammonium chloride / N-Alkyl(C12-14)-N,N-dimethyl ethylbenzene aminium chloride / C12-14-Alkyldimethyl(ethylbenzyl) ammonium chlorides / Quaternary ammonium compounds, alkyl(C12-14)[(ethylphenyl)methyl]dimethyl, chlorides / C12-14-Alkyl(ethylbenzyl)dimethyl ammonium chlorides / Alkyl(C12-14)-N,N-dimethyl(ethylbenzyl)aminium chloride	CAS-No.: 85409-23-0	1 – 5

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: 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.
First-aid measures after ingestion	: IF SWALLOWED: Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a POISON CENTER/doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/effects after ingestion	: Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard	: Products of combustion may include, and are not limited to: oxides of carbon. Irritating vapours.
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5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
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6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

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6.3. Methods and material for containment and cleaning up

- For containment : Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.
- Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. If medical advice is needed, have product container or label at hand. Keep container tightly closed when not in use.
- Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Containers which are opened should be properly resealed and kept upright to prevent leakage.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ViveSecure 100	
No additional information available	
Hydrogen peroxide (7722-84-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	1 ppm
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA [1]	1.4 mg/m ³
OSHA PEL TWA [2]	1 ppm
USA - IDLH - Occupational Exposure Limits	
IDLH [ppm]	75 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	1.4 mg/m ³
NIOSH REL TWA [ppm]	1 ppm
Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides (68391-01-5)	
No additional information available	

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Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides (85409-23-0)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Provide readily accessible eye wash stations and safety showers.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves resistant to chemical penetration

Eye protection:

Wear eye/face protection

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : No data available.
Colour : Colourless
Odour : Odourless
Odour threshold : No data available
pH : 3.01 – 6.2
Melting point : No data available
Freezing point : No data available
Boiling point : 100 °C / 212 °F
Flash point : No data available
Relative evaporation rate (butylacetate=1) : No data available
Flammability : No data available
Vapour pressure : 23 hPa at 20°C/68°F (17.3 mm Hg)
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : 1 g/cm³
Solubility : completely miscible.
Partition coefficient n-octanol/water : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive limits : No data available
Explosive properties : No data available

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According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Oxidising properties : No data available

9.2. Other information

Bulk density : 8.53 lb/gal

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Chlorine compounds. Irritating fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Not classified.

Acute toxicity (inhalation) : Not classified.

ViveSecure 100	
LD50 oral rat	550 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 0.61 mg/l
Hydrogen peroxide (7722-84-1)	
LD50 oral rat	1518 mg/kg
LD50 dermal rabbit	9200 mg/kg
LC50 inhalation rat	2000 mg/m ³ (Exposure time: 4 h)
ATE CA (oral)	1518 mg/kg bodyweight
ATE CA (Dermal)	9200 mg/kg bodyweight
ATE CA (Gases)	100 ppmv/4h
ATE CA (vapours)	2 mg/l/4h
ATE CA (dust,mist)	2 mg/l/4h

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Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides (68391-01-5)	
LD50 oral rat	850 mg/kg
LD50 dermal rabbit	2300 mg/kg
ATE CA (oral)	850 mg/kg bodyweight
ATE CA (Dermal)	2300 mg/kg bodyweight

Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides (85409-23-0)	
LD50 oral rat	344 mg/kg bodyweight Animal: rat
LD50 dermal rabbit	2300 mg/kg
ATE CA (oral)	344 mg/kg bodyweight
ATE CA (Dermal)	2300 mg/kg bodyweight

Skin corrosion/irritation	: Causes skin irritation. pH: 3.01 – 6.2
Serious eye damage/irritation	: Causes serious eye damage. pH: 3.01 – 6.2
Respiratory or skin sensitisation	: Not classified.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.

Hydrogen peroxide (7722-84-1)	
IARC group	3 - Not classifiable

Reproductive toxicity	: Not classified.
STOT-single exposure	: Not classified.

Hydrogen peroxide (7722-84-1)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure	: Not classified.
Aspiration hazard	: Not classified.
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/effects after ingestion	: Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
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Hydrogen peroxide (7722-84-1)	
LC50 - Fish [1]	16.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 - Crustacea [1]	18 – 32 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 - Fish [2]	18 – 56 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
LOEC (chronic)	1.25 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.63 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

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According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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Hydrogen peroxide (7722-84-1)

BCF - Fish [1]	(no bioaccumulation)
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

DOT NA No	: UN1760
UN-No. (TDG)	: UN1760
UN-No. (IMDG)	: 1760
UN-No. (IATA)	: 1760

14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Corrosive liquids, n.o.s. (quaternary ammonium compounds)
Proper Shipping Name (TDG)	: Corrosive liquids, n.o.s. (quaternary ammonium compounds)
Proper Shipping Name (IMDG)	: Corrosive liquids, n.o.s. (quaternary ammonium compounds)
Proper Shipping Name (IATA)	: Corrosive liquids, n.o.s. (quaternary ammonium compounds)

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: 8
Hazard labels (DOT)	: 8



Note: Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

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TDG

Transport hazard class(es) (TDG) : 8

Hazard labels (TDG) : 8



Note: Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

IMDG

Transport hazard class(es) (IMDG) : 8

Danger labels (IMDG) : 8



Note: Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

IATA

Transport hazard class(es) (IATA) : 8

Danger labels (IATA) : 8



Note: See IATA for Limited Quantity Information.

14.4. Packing group

Packing group (DOT) : III

Packing group (TDG) : III

Packing group (IMDG) : III

Packing group (IATA) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

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

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides

CAS-No. 85409-23-0

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All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories except for:

Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides

CAS-No. 85409-23-0

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986) - This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

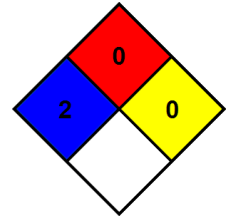
SECTION 16: Other information

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Revision date : 03/22/2023
Other information : None.
Prepared by : Nexreg Compliance Inc.
www.Nexreg.com



NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating
Health : 2 Moderate Hazard - Temporary or minor injury may occur
Flammability : 0 Minimal Hazard - Materials that will not burn
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS HazCom 2012 - WHMIS 2015 (Nexreg) 2021

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