

SAFETY DATA SHEET

Triple7 AquaSmart

Infosafe No.: LQ5YJ
Issued Date: 16/09/2016
Issued by: Envirofluid

1. IDENTIFICATION

GHS Product Identifier

Triple7 AquaSmart

Product Code

AAAQS-5, 5 litres; AAAQS-20, 20 litres; AAAQS-200, 200 litres

Company Name

Envirofluid

Address

39 Coghlan Road Warrnambool
Victoria 3280 Australia

Telephone/Fax Number

Tel: 1800 777 580 (8am - 5pm AEST)
Fax: 1300 777 580

Emergency phone number

1800 638 556 (24h) / +61 3 5564 6455

E-mail Address

info@envirofluid.com

Recommended use of the chemical and restrictions on use

General purpose antiviral disinfectant, hydrogen peroxide water treatment.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Non-Dangerous Goods.
Non-Hazardous substance.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Hydrogen peroxide	7722-84-1	1.5 %
Ingredients determined not to be hazardous		Balance



4. FIRST-AID MEASURES

Inhalation

If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.

Skin

Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention.

First Aid Facilities

Eyewash and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

Hydrogen peroxide at moderate concentrations (5% or more) is a strong oxidant. Direct contact with the eye is likely to cause corneal damage especially if not washed immediately. Careful ophthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered. Because of the likelihood of systemic effects attempts at evacuating the stomach via emesis induction or gastric lavage should be avoided. There is remote possibility, however, that a nasogastric or orogastric tube may be required for the reduction of severe distension due to gas formation.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide, dry chemical or foam.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.

Specific Hazards Arising From The Chemical

This product will burn if exposed to fire.

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.



6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid inhalation of vapours and mists, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of mists or vapours in the work atmosphere. Do not use near ignition sources. Do not pressurise, cut, heat or weld containers as they may contain hazardous residues. Maintain high standards of personal hygiene by washing hands prior to eating, drinking, smoking or using toilet facilities.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

Recommended Materials

Polyethylene or polypropylene container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

Hydrogen peroxide

TWA: 1 ppm

TWA: 1.4 mg/m³

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

Biological Limit Values

No biological limits allocated.

Appropriate Engineering Controls

Provide sufficient ventilation to keep airborne levels below the exposure limits or as low as possible. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required. Refer to relevant regulations for further information concerning ventilation requirements.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective



requirements.

Reference should be made to Australian/New Zealand Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material such as chemical resistance of glove material, do not use gloves such as NAT+neopr+nitril, natural rubber, natural+neoprene, neoprene, neoprene/natural, nitrile and PVC. When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Liquid

Appearance

Colourless liquid with no odour; mixes with water.

Colour

Colourless

Odour

Odourless liquid

Decomposition Temperature

Not available

Melting Point

0°C

Freezing Point

0°C

Boiling Point

100°C

Solubility in Water

Miscible

Specific Gravity

Not available

pH

4



Vapour Pressure

2.3 kPa

Vapour Density (Air=1)

Not available

Evaporation Rate

Not available

Odour Threshold

Not available

Viscosity

Not available

Volatile Component

Not available

Partition Coefficient: n-octanol/water

Not available

Flash Point

Not relevant

Flammability

Combustible

Auto-Ignition Temperature

Not available

Flammable Limits - Lower

Not available

Flammable Limits - Upper

Not available

Relative density

1 (Water=1)

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions of storage and handling.

Reactivity and Stability

Reacts with incompatible materials.

Conditions to Avoid

Heat, open flames and other sources of ignition.

Incompatible materials

Avoid reaction with oxidising agents, reducing agents, strong acids, strong bases, acid chlorides, acid anhydrides and chloroformates.

Hazardous Decomposition Products

Thermal decomposition may result in the release of toxic and/or irritating fumes. Solutions of hydrogen peroxide slowly decompose, releasing oxygen, and so are often stabilised by the addition of acetanilide etc.

Possibility of hazardous reactions

Not available



Hazardous Polymerization

Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

No toxicity data available for this material. The available acute toxicity data for the ingredient/s is/are given below.

Acute Toxicity - Oral

Hydrogen peroxide
LD50(rat): 75 mg/kg

Acute Toxicity - Inhalation

Hydrogen peroxide
LD50(rat): 2 mg/L/4H

Acute Toxicity - Dermal

Hydrogen peroxide
LD50(rat): 3000 - 5480 mg/kg

Ingestion

Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

Inhalation

Inhalation of product vapours may cause irritation of the nose, throat and respiratory system.

Skin

May be irritating to skin. The symptoms may include redness, itching and swelling

Eye

May be irritating to eyes. The symptoms may include redness, itching and tearing.

Respiratory sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ cell mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Hydrogen peroxide is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT-single exposure

Not expected to cause toxicity to a specific target organ.

STOT-repeated exposure

Not expected to cause toxicity to a specific target organ.

Aspiration Hazard

Not expected to be an aspiration hazard.

Other Information

Hydrogen peroxide: Asthma-like symptoms may continue for months or even years after exposure to the material



ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucus production. Exposure to hydrogen peroxide via the skin or oral route can produce toxic effects. Animal studies have shown evidence of damage to the kidney, gut, thymus and liver. Stomach and intestinal lesions including benign and malignant cancers have been observed in mice. It may produce genetic and developmental defects but no reproductive toxicity was reported in mice. Evidence of carcinogenicity may be inadequate or limited in animal testing.

12. ECOLOGICAL INFORMATION

Ecotoxicity

No ecological data available for this material. The available ecological data for the ingredients is given below:

Persistence and degradability

Hydrogen peroxide:

Persistence: Water/Soil: Low

Persistence: Air: Low

Mobility

Mobility in soil

Hydrogen peroxide: LOW (KOC = 14.3)

Environmental Fate

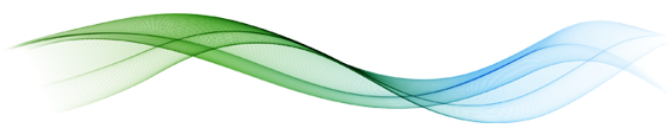
Hydrogen peroxide:

log Kow: -1.36

Hydrogen peroxide is a naturally occurring substance (typical background concentrations < 1 - 30 g/l), which is produced by almost all cells in their metabolism, with the exception of anaerobic bacteria. Hydrogen peroxide is a reactive substance in the presence of other substances, elements, radiation, materials and can be degraded by microorganisms or higher organisms. Air - Hydrogen peroxide is degraded by light and thus may be removed from the atmosphere by photolysis giving rise to hydroxyl radicals, by reaction with hydroxyl radicals, or by heterogenous loss processes such as rain-out. Significantly higher hydrogen peroxide concentrations are found in polluted atmospheres as compared with clean air, presumably due to oxidation of reactive hydrocarbons as a result of exposure to light. Soil - No information was found regarding the transformation or persistence of hydrogen peroxide in soil, however, solutions of hydrogen peroxide gradually deteriorate. Water - Hydrogen peroxide is a naturally occurring substance. Surface water concentrations of hydrogen peroxide have been found to vary between 51-231 mg/L, increasing both with exposure to sunlight and the presence of dissolved organic matter. Hydrogen peroxide degrades by various mechanisms, including chemical reduction and enzymatic decomposition by algae, zooplankton, and bacteria. However microorganisms, especially bacteria, account for the majority of degradation. The rate of decomposition in natural water varies from a few minutes to more than a week, depending on numerous chemical, biological, and physical factors. Hydrogen peroxide is rapidly degraded in a biological waste water treatment plant. Hydrogen peroxide adsorbs poorly to sediment particles and is rapidly degraded, thus accumulation in the sediment is also not expected. Hydrogen peroxide (log Kow < -1) is an inorganic substance and therefore shows little potential to bioaccumulate.

Bioaccumulative Potential

Hydrogen peroxide:



Bioaccumulation: LOW (LogKOW = -1.571)

Other Adverse Effects

Not available

Environmental Protection

Prevent this material entering waterways, drains and sewers.

Acute Toxicity - Fish

LC50(catfish): 37.4 mg/l/96h

LC50(mackerel): 89 mg/l/24h

LC50(chameleon gobi) 155 mg/l/24h

LC50(Zebra mussel): 30 mg/l/28h

LC50(Zebra mussel): 12 mg/l/228h

Hydrogen peroxide

LC50: 0.020mg/L/96h

NOEC: 0.028mg/L/192h

Acute Toxicity - Algae

Hydrogen peroxide

EC50(Algae or other aquatic plants): 0.27mg/L/3h

EC50(Algae or other aquatic plants): 0.71mg/L72h

Acute Toxicity - Other Organisms

Hydrogen peroxide

EC50(Crustacea): 2.32mg/L/48h

13. DISPOSAL CONSIDERATIONS

Disposal considerations

The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.

14. TRANSPORT INFORMATION

Transport Information

Road and Rail Transport (ADG Code):

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).

Marine Transport (IMO/IMDG):

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

U.N. Number

None Allocated

UN proper shipping name

None Allocated



Transport hazard class(es)

None Allocated

Special Precautions for User

Not available

IMDG Marine pollutant

No

Transport in Bulk

Not available

15. REGULATORY INFORMATION

Regulatory information

Not classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Poisons Schedule

Not Scheduled

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS Created: September 2016

References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants, Safe work Australia.

American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of classification and labelling of chemicals.

END OF SDS

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

The compilation of SDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copying of any SDS displayed is permitted for personal use only and otherwise is not permitted. In particular the SDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of SDS without the express written consent of Chemical Safety International Pty Ltd.

