MATERIAL SAFETY DATA SHEET

AQUI-S®

Section 1: IDENTIFICATION OF THE SUBSTANCE & SUPPLIER

Product Name: AQUI-S®

Recommended use: Aquatic Anaesthetic

Company details: AQUI-S New Zealand Ltd

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Hours 8am - 5pm, Mon - Fri

Date of Preparation: April 2009

Section 2: HAZARD IDENTIFICATION

Hazard classifications: 6.1E, 6.3A, 6.4A, 6.5B, 6.9B

Primary identifiers Keep out of reach of children.

For animal treatment only.

Secondary identifier 6.1E Harmful if swallowed

6.3A May cause skin irritation6.4A May cause eye irritation

6.5B May cause an allergic skin reaction

6.9B May cause organ damage from repeated oral exposure at

high doses

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical NameCAS NumberConcentrationIsoeugenol97-54-1 $\sim 50\%$ Excipient- $\sim 50\%$

Section 4: FIRST AID MEASURES

Necessary First Aid Measures:

SKIN CONTACT: If skin contact occurs, remove contaminated clothing and wash the affected area with soap and water. If irritation occurs or persists, seek medical attention.

EYE CONTACT: In case of eye contact, immediately rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. If irritation occurs or persists, consult a doctor.

INGESTION: Give up to two glasses of water or milk. Seek medical advice immediately.

INHALATION: If inhaled, move the victim to fresh air immediately. If irritation occurs or persists, seek medical attention.

Required instructions: For advice contact the National Poisons Centre 0800 POISON (0800

764 766) or a doctor.

Workplace facilities: Emergency showers and eyewashes may be warranted depending on

quantity and type of use.

Hygiene instructions: Avoid ingestion, inhalation and contact with skin and eyes. Do not

eat, drink or smoke while using this product. Wash hands and exposed skin before eating, drinking or smoking and after work. Wash

any protective clothing after use.

Notes for Medical

Personnel:

Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Flammability: Do not use close to ignition sources.

Extinguishing media &

Methods:

Use Foam, carbon dioxide or dry chemical extinguishers.

Recommended protective clothing:

This product is not very flammable but toxic vapours may be released during fire. Wear full protective clothing and self-contained breathing

apparatus (SCBA).

Hazchem code: None allocated

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency procedures:

Personnel involved in clean-up should wear appropriate personal protective equipment to minimise exposure. This may include the use of eye protection, chemically resistant gloves, boot and/or overalls. Evacuate the spill area and deny entry to unnecessary and unprotected personnel.

Prevent further spillage & prevent material from entering surface water drains or waterways. If a significant quantity of material enters drains, advise emergency services.

Spill Procedure: Small spills can be wiped up with cloth or paper. Standard

absorbants (sand, sawdust, vermiculite, etc) can be used to contain

large spills. Wash area with water after mop up.

Remove all ignition sources.

Section 7: HANDLING & STORAGE

Precautions for Safe Avoid contact with skin, & eyes. Keep containers adequately sealed

during material transfer, transport, or when not in use. Handling:

Regulatory Not applicable.

Requirements:

Handling Practices: Change work clothes regularly. Avoid ingestion, inhalation and contact

with skin and eyes. Do not eat, drink or smoke while using this

product.

Wash hands and exposed skin before eating, drinking or smoking

and after handling.

Approved Handlers: Not required.

Conditions for Safe Keep out of reach of children.

Storage: Store in original container & keep tightly sealed when not in use. Store below 30°C (Room Temperature) in a cool dry area, away Storage Site

Requirements: from direct heat or direct sunlight.

HDPE containers. Packaging:

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

No WES have been set for this substance.

Workplace Exposure

Standards:

Application in the

Workplace:

No TEL is set for this substance at this time.

Exposure Standards Outside the Workplace: EEL - Not applicable.

Engineering Controls: Engineering controls should be used as the primary means to control

> exposures. Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below

Ensure adequate ventilation. Keep container sealed when not in use.

recommended exposure limits.

Wear chemical resistant gloves, overalls, & a face-shield or safety **Personal Protection:**

glasses. A respirator may be required if using in confined or poorly

ventilated conditions.

Section 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance: Clear viscous yellow liquid

Odour: Floral carnation, clove

Boiling Point: 266°C (1 atm)

<0.02 mm/Hg @ 25°C **Vapour Pressure:**

Specific Gravity: 1.090 Flash Point: 130°C

Flammability Limits: Not available, combustible

Solubility: Dispersible and slightly soluble in water.

Soluble in ethanol

Section 10: STABILITY & REACTIVITY

Stability of the Substance: Stable under normal temperatures and pressures

Strong oxidisers

Conditions to Avoid: Avoid high temperatures

Material to Avoid:

Hazardous Decomposition

Carbon monoxide, carbon dioxide

Products:

Section 11: TOXICOLOGICAL INFORMATION

Oral: Isoeugenol - LD50 (rats) = 1560 mg/kg;

Dermal: Isoeugenol - Draize test, rabbit, skin: 100 mg/24H Severe;

Other Toxicity Info: Not Available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Daphnia magnaWater flea (48h) LC_{50} (mg/L) 10.3Pimephales promelasFathead minnow (96h) LC_{50} (mg/L) 18.6Oncorhynchus mykissRainbow trout (96h) LC_{50} (mg/L) 7.7Coturnix sp.Quail LC_{50} (mg/kg) 316

Section 13: DISPOSAL CONSIDERATIONS

Disposal: Incineration or landfill in accordance with local authority &

Government regulations.

Section 14: TRANSPORT INFORMATION

Relevant Information: No special transport requirements necessary.

Section 15: REGULATORY INFORMATION

HSNO Approval Number: HSR001977

HSNO Controls: See http://www.ermanz.govt.nz/search/registers.html for controls.

ACVM Registration

Number:

A007227

ACVM Controls: See http://www.nzfsa.govt.nz/acvm/ for registration conditions.

Section 16: OTHER INFORMATION

Additional Information: AQUI-S[®] is a registered trademark of AQUI-S New Zealand Ltd.

AQUI-S NZ Ltd urges each user or recipient of this MSDS to read the entire data sheet to become aware of the potential hazards associated with this material. This MSDS summarizes, at the date of issue, our best knowledge of the health and safety hazard information. Although reasonable care has been taken in the preparation of this document, AQUI-S NZ Ltd extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequence of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).