

## K-SEAL

Infosafe No.: LQ2FL  
ISSUED Date : 30/08/2018  
ISSUED by: RITTCO DISTRIBUTING

### 1. IDENTIFICATION

**GHS Product Identifier**

K-SEAL

**Company Name**

RITTCO DISTRIBUTING

**Address**

16 Phillips Street Cabarita  
NSW 2137 Australia

**Telephone/Fax Number**

Tel: 1 800 010 252

**Emergency phone number**

1800 638 556(24 hr)

**Recommended use of the chemical and restrictions on use**

Additive for engine cooling systems.

### 2. HAZARD IDENTIFICATION

**GHS classification of the substance/mixture**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Eye Damage/Irritation: Category 2

Sensitization - Skin: Category 1

Hazardous to the Aquatic Environment - Long-Term Hazard: Category 2

**Signal Word (s)**

WARNING

**Hazard Statement (s)**

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

**Pictogram (s)**

Exclamation mark, Environment

**Precautionary statement – Prevention**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash contaminated skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

#### Precautionary statement – Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313 If skin irritation or rash 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.

P337+P313 If eye irritation persists: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

#### Precautionary statement – Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients

Name	CAS	Proportion
Bis(D-gluconato-O1,O2)zinc	4468-02-4	2.5-<5 %
Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched	127087-87-0	1-<2.5 %
Copper	7440-50-8	0.5-<1 %
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one (3:1)	55965-84-9	<0.025 %
Ingredients determined not to be hazardous, including water		Balance

### 4. FIRST-AID MEASURES

#### Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

#### Ingestion

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

#### First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

#### Advice to Doctor

Treat symptomatically. May cause allergic skin disorders in sensitive individuals.

#### Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

### 5. FIRE-FIGHTING MEASURES

#### Suitable Extinguishing Media

Water fog, carbon dioxide, dry chemical or foam. Alcohol resistant foam is preferred. If not available normal foam can be used.

#### Unsuitable Extinguishing Media

Do not use water jet. Direct water jet may spread the fire.

### **Hazards from Combustion Products**

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

### **Specific Hazards Arising From The Chemical**

This product is non combustible. However, following evaporation of aqueous component under fire conditions, the non-aqueous component may decompose and/or burn. Heating can cause expansion or decomposition leading to violent rupture of containers.

### **Hazchem Code**

•3Z

### **Decomposition Temperature**

Not available

### **Precautions in connection with Fire**

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location. Collect contaminated fire extinguishing water separately. Avoid release to the environment.

## **6. ACCIDENTAL RELEASE MEASURES**

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### **Emergency Procedures**

Wear appropriate personal protective equipment and clothing to prevent exposure. Do not touch or walk through spilled material. Evacuate all unprotected personnel. Increase ventilation. If possible contain the spill. Place inert absorbent material onto spillage. Collect the material and place into a suitable labelled container. As a water based product, if spilt on electrical equipment the product will cause short-circuits. Do not dilute material but contain. Avoid discharge into drains or watercourses or onto the ground. 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**

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### **Precautions for Safe Handling**

Do not handle until all safety precautions have been read and understood. 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 touch damaged containers or spilled material unless wearing appropriate protective clothing. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not reuse empty containers. Do not discharge this material into waterways, drains and sewers.

### **Conditions for safe storage, including any incompatibilities**

Keep out of the reach of children. Store in a cool, dry, well-ventilated area, out of direct sunlight. Protect from freezing. Keep containers upright. Store in suitable, labelled containers. Keep containers tightly closed. Protect containers against physical damage. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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### **Occupational exposure limit values**

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Copper

TWA: 0.2 mg/m<sup>3</sup> Copper (fume)

TWA: 1 mg/m<sup>3</sup> Copper, dusts & mists (as Cu)

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.

Source: Safe Work Australia

### **Biological Limit Values**

No biological limits allocated.

### Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn.

### 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 Standards AS/NZS 1715 (2009), Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716 (2012), 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 2 & 6 (2012) - Eye Protectors for Industrial Applications.

### Hand Protection

Wear gloves of impervious material such as natural rubber, latex, polyvinyl chloride (PVC) or nitrile rubber. 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. Frequent changes are recommended.

Reference should be made to AS/NZS 2161.1 (2016): 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

Properties	Description	Properties	Description
Form	Liquid	Appearance	Light brown liquid
Colour	Light brown	Odour	Mild
Decomposition Temperature	Not available	Melting Point	Not available
Boiling Point	Not available	Solubility in Water	Soluble (~92%)
Specific Gravity	1.045 (21.1°C)	pH	5.9 (concentrated solution)
Vapour Pressure	Not available	Vapour Density (Air=1)	Not available
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	Not available	Volatile Component	~80%
Partition Coefficient: n-octanol/water	Not available	Flash Point	Not applicable
Flammability	Not flammable	Auto-Ignition Temperature	Not available
Flammable Limits - Lower	Not available	Flammable Limits - Upper	Not available
Explosion Properties	Product is not explosive.	Oxidising Properties	Not oxidising

## 10. STABILITY AND REACTIVITY

### Reactivity

Reacts with incompatible materials.

### Chemical Stability

Stable under normal conditions of storage and handling.

### Conditions to Avoid

Extremes of temperature and direct sunlight. Protect from freezing.

**Incompatible materials**

Strong oxidising agents. Strong acids, alkalis, alkali metals, alkaline earth metals.

**Hazardous Decomposition Products**

Thermal decomposition may result in the release of toxic and/or irritating fumes, smoke and gases including: phenols, halogenated phenols, carbon dioxide, carbon monoxide and oxides of nitrogen.

**Possibility of hazardous reactions**

No potentially hazardous reactions known.

**Hazardous Polymerization**

Not available

## 11. TOXICOLOGICAL INFORMATION

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**Toxicology Information**

Toxicity data for material given below.

**Acute Toxicity - Oral**

LD50(oral): 2.83 ml/kg

**Acute Toxicity - Inhalation**

Copper

LC50(rat): >5.11 mg/l

**Acute Toxicity - Dermal**

Copper

LD50(rat): >2000 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. Exposure to high concentrations, may damage respiratory system.

**Skin**

May be irritating to skin. The symptoms may include redness and itching. May cause an allergic skin reaction.

Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched

Result: Irritating

Copper

Species: Rabbit

Dose Levels: 0.5 g, 4 hours

Erythema/eschar score: No erythema (0)

Oedema score: No oedema (0)

**Eye**

Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched

Result: Causes serious eye damage.

**Respiratory sensitisation**

Not expected to be a respiratory sensitiser.

**Skin Sensitisation**

May cause an allergic skin reaction.

Copper

Species: Guinea pig

Result: Did not show a sensitising effect.

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one (3:1)

Result: Sensitising

**Germ cell mutagenicity**

Not considered to be a mutagenic hazard.

**Carcinogenicity**

Not considered to be a carcinogenic hazard

**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.

Copper

NOAEL (oral, rat): 1000 ppm

Method: Two generation study

**Aspiration Hazard**

Not expected to be an aspiration hazard

## 12. ECOLOGICAL INFORMATION

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**Ecotoxicity**

Toxic to aquatic life with long lasting effects.

Bis(D-gluconato-O1,O2)zinc

Acute aquatic toxicity:  $0.1 < LC50/EC50 \leq 1$

M-factor (acute aquatic toxicity): 1

M-factor (chronic aquatic toxicity): 1

Copper

Acute aquatic toxicity:  $0.1 < LC50/EC50 \leq 1$

M-factor (acute aquatic toxicity): 1

Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched

Harmful to aquatic life with long lasting effects.

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one (3:1)

Acute aquatic toxicity:  $0.01 < LC50/EC50 \leq 0.1$

M-factor (acute aquatic toxicity): 10

M-factor (chronic aquatic toxicity): 10

**Persistence and degradability**

Product:

Not available

Copper

The product contains inorganic substances which are not biodegradable.

**Mobility**

The product is water-soluble and may spread in water systems.

**Bioaccumulative Potential**

Not available

**Other Adverse Effects**

Not available

**Environmental Protection**

Prevent this material entering waterways, drains and sewers.

**Acute Toxicity - Fish**

Copper:

LC50 (Oncorhynchus mykiss (Rainbow trout)): 0.2 mg/l/96h

NOEC (Oncorhynchus mykiss (Rainbow trout)): 11.4 µg/l/45d

#### **Acute Toxicity - Daphnia**

Copper:

EC50(Daphnia magna): 0.529 mg/l/48h

### **13. DISPOSAL CONSIDERATIONS**

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#### **Disposal considerations**

Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations.

### **14. TRANSPORT INFORMATION**

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#### **Transport Information**

Road and Rail Transport:

This material is classified as Dangerous Goods Class 9 Miscellaneous Dangerous Goods

Class 9: Miscellaneous substances Dangerous Goods are incompatible in a placard load with any of the following:

Class 1: Explosives (when the class 9 substance is a fire risk substance)

Division 5.1: Oxidising substances (when the class 9 substance is a fire risk substance) and

Division 5.2: Organic peroxides (when the class 9 substance is a fire risk substance)

Note: Special Provision AU01:

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in:

packagings that do not incorporate a receptacle exceeding 500 kg(L); or

IBCs

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Class/Division: 9

UN No: 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains Bis(D-gluconato-O1,O2)zinc)(Bis(D-gluconato-O1,O2)zinc) MARINE POLLUTANT

Packaging Group: III

EMS: F-A, S-F

Special provisions: 274 335 969

Air Transport (ICAO/IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Class/Division: 9

UN No: 3082

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Contains Bis(D-gluconato-O1,O2)zinc)

Packing Group: III

Packaging Instructions (passenger & cargo): 964

Packaging Instructions (cargo only): 964

Hazard Label: Miscellaneous

Special provisions: A97 A158 A197

#### **U.N. Number**

3082

#### **UN proper shipping name**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Contains Bis(D-gluconato-O1,O2)zinc)

#### **Transport hazard class(es)**

9

**Packing Group**

III

**Hazchem Code**

•3Z

**IERG Number**

47

**IMDG Marine pollutant**

Yes

**Transport in Bulk**

Not available

**Special Precautions for User**

Not available

## 15. REGULATORY INFORMATION

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**Regulatory information**

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

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**Date of preparation or last revision of SDS**

SDS Reviewed: August 2018, Supersedes: July 2013

**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.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of Classification and Labelling of Chemicals.

## END OF SDS

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