

SAFETY DATA SHEET

K-SEAL ULTIMATE

Infosafe No.: LQ9L2
ISSUED Date : 22/08/2019
ISSUED by: RITTCO DISTRIBUTING PTY LTD

1. IDENTIFICATION

GHS Product Identifier

K-SEAL ULTIMATE

Product Code

3501

Company Name

RITTCO DISTRIBUTING PTY LTD

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.

Not 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 2A

Hazardous to the Aquatic Environment - Acute Hazard: Category 2

Hazardous to the Aquatic Environment - Long-Term Hazard: Category 3

Signal Word (s)

WARNING

Hazard Statement (s)

H319 Causes serious eye irritation.

H401 Toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Pictogram (s)

Exclamation mark

**Precautionary statement – Prevention**

P264 Wash contaminated skin thoroughly after handling.

P273 Avoid release to the environment.

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

Precautionary statement – Response

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.

Precautionary statement – Disposal

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

| Name | CAS | Proportion |
|---|-------------|------------|
| Sodium Borate | 1330-43-4 | 1-<2.5 % |
| Zinc Gluconate | 4468-02-4 | <2 % |
| Copper | 7440-50-8 | 0.1-1 % |
| Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched | 127087-87-0 | <1 % |
| Refractories, Fibers, Aluminosilicate | 142844-00-6 | 0-<0.1 % |
| Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [CAS No. 26172-55-4] and 2-methyl-2Hisothiazol-3-one [CAS No. 2682-20-4] (3:1) | 55965-84-9 | <0.0014% |
| 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 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.

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

Carbon dioxide, dry chemical, foam, water mist or water spray. Alcohol resistant foam is preferred.

Unsuitable Extinguishing Media

Do not use water jet.

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 is non combustible.

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.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure. Increase ventilation. If possible contain the spill. Place inert absorbent material onto spillage. Collect the material and place into a suitable labelled container. Do not dilute material but contain. 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. Maintain high standards of personal hygiene i.e. 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, out of direct sunlight. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

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

Boron sodium oxide:

TWA: 1 mg/m³

Copper dusts & mists (as Cu)

TWA: 1 mg/m³

Copper (fume)

TWA: 0.2 mg/m³

Refractory Ceramic Fibres (RCF)

TWA: 0.5 f/mL (respirable); 2 mg/m³ (inhalable dust)

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, 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

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

Hand Protection

Wear gloves of impervious material such as rubber (natural, latex), polyvinyl chloride (PVC) and 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. 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

| 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 | Not available |
| Specific Gravity | 1.039-1.104 (21.1°C) | pH | pH (concentrated solution): 6.3-7.1 |
| Vapour Pressure | Not available | Vapour Density (Air=1) | Not available |
| Evaporation Rate | Not available | Odour Threshold | Not available |
| Viscosity | Not available | Volatile Component | Approximate 50% |
| Partition Coefficient: n-octanol/water | Not available | Density | Bulk density: 1038.90-1103.60 kg/m ³ (8.67-9.21 lb/gal us) |
| Flash Point | Not applicable | Flammability | Non combustible material |
| Auto-Ignition Temperature | Not available | Flammable Limits - Lower | Not applicable |
| Flammable Limits - Upper | Not applicable | | |

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions of storage and handling.

Reactivity and Stability

Reacts with incompatible materials.

Conditions to Avoid

Extremes of temperature and direct sunlight. Avoid excessive heat for prolonged periods of time.

Incompatible materials

Strong oxidising agents.

Hazardous Decomposition 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.

Possibility of hazardous reactions

Not available

Hazardous Polymerization

Not available

11. TOXICOLOGICAL INFORMATION

Toxicology Information

No toxicity data available for this material. The available acute toxicity data for the ingredients are given below.

Acute Toxicity - Oral

Sodium Borate

LD50(rat): 3450 mg/kg

REACH dossier information

Copper

LD50(rat)>2500 mg/kg

REACH dossier information

Acute Toxicity - Inhalation

Sodium Borate

LC50(rat) >2.04 mg/l

REACH dossier information

Copper

LC50(rat) >5.11 mg/l

REACH dossier information

Acute Toxicity - Dermal

Sodium Borate

LD50(rabbit) >2000 mg/kg

REACH dossier information

Copper

LD50(rat) >2000 mg/kg

REACH dossier information

Ingestion

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

Inhalation

Not a likely source of exposure. May cause irritation to the mucous membranes and upper airways.

Skin

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

Sodium Borate

Dose: 0.5g, 24 hours, Rabbit Erythema/eschar score: No erythema (0). Edema score: No oedema (0). REACH dossier information.

Copper

Dose: 0.5 g, 4 hours, Rabbit Erythema/eschar score: No erythema (0). Edema score: No oedema (0). REACH dossier information.

Eye

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

Sodium Borate

Dose: 0.08 mL, 14 days, Rabbit REACH dossier information.

Respiratory sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Sodium Borate

Buehler test - Guinea pig: Not sensitizing. REACH dossier information.

Copper

Guinea pig maximization test (GPMT) - Guinea pig: Not sensitizing. REACH dossier information.

Germ cell mutagenicity

Not considered to be a mutagenic hazard.

Sodium Borate

Genotoxicity - in vitro DNA damage and/or repair: Negative. REACH dossier information.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information.

Copper

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information.

Genotoxicity - in vivo DNA damage and/or repair: Negative. REACH dossier information.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Refractory ceramic fibres listed as a Group 2B: Possibly carcinogenic to humans according to International Agency for Research on Cancer (IARC).

Sodium Borate

NOAEL >5000 ppm, Oral, Mouse REACH dossier information.

Reproductive Toxicity

Not considered to be toxic to reproduction.

Sodium Borate

Reproductive toxicity - fertility

Three-generation study - NOAEL 100 mg/kg/day, Oral, Rat F1 REACH dossier information. May damage fertility.

Reproductive toxicity - development

Developmental toxicity: - NOAEL: 55 mg/kg/day, Oral, Rat REACH dossier information. May damage the unborn child.

Copper

Two-generation study - NOAEL 1000 ppm, Oral, Rat P REACH dossier information.

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.

Sodium Borate

NOAEL 100 mg/kg/day, Oral, Rat REACH dossier information.

Aspiration Hazard

Not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Persistence and degradability

Copper

Inorganic substances which are not biodegradable.

Mobility

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

Sodium Borate

Soluble in water.

Surface tension 71 mN/m @ 23°C

Copper

The product is insoluble in water.

Bioaccumulative Potential

Sodium Borate

BCF: 0.7-1.4, *Crassostrea gigas* (Pacific oyster)

Partition coefficient log Pow: -1.53

Other Adverse Effects

Not available

Environmental Protection

Prevent this material entering waterways, drains and sewers.

Acute Toxicity - Fish

Sodium Borate

LC50(*Limanda limanda* (common dab)): 74 mg/l/96h

Copper

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

Acute Toxicity - Algae

Sodium Borate

EC50(*Selenastrum capricornutum*): 40.2 mg/l/72h

Copper

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

Acute Toxicity - Other Organisms

Sodium Borate

LC50(*Legumia recta* (Black sandshell mussel)): 147 mg/l/96h

Other Information

Copper

Short term toxicity - embryo and sac fry stages

NOEC, 45 days: 11.4 µg/l, *Oncorhynchus mykiss* (Rainbow trout)

13. DISPOSAL CONSIDERATIONS

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

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

IMDG Marine pollutant

No

Transport in Bulk

Not applicable

Special Precautions for User

Not available

15. REGULATORY INFORMATION

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

Date of preparation or last revision of SDS

SDS created: August 2019

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.

Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

END OF SDS

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