

SDS 5510 Date of Issue:-10.07.2019 **Date of Expiry:-10.07.2024**

User declaration:- I have read and understood this Safety Data Sheet

Name:- _____ Signature _____ Date _____

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name



Address: 39 Woodside Ave, Northcote, Auckland , New Zealand

Emergency Tel: NZ 0800154666 | Tel +64 9 480 4386 | FAX +64 9 480 4385

Product	Zinc Chloride			Code(s)	55101 and 55108
CAS#	HSNO#	UN #	DG Class/es	Packing group #	
7646-85-7	HSR001554	2331	8	III	

Recommended use: Laboratory Investigations

2. Hazards Identification

2.1 New Zealand HSNO Classification

- 6.1C (Oral) - Substance that is acutely toxic
- 6.1E (Inhalation – vapours, dusts or mists) - Substance that is acutely toxic
- 8.1A - Substance that is corrosive to metals
- 8.2C - Substance that is corrosive to dermal tissue
- 8.3A - Substance that is corrosive to ocular tissue
- 9.1A - Substance that is very ecotoxic in the aquatic environment
- 9.3B - Substance that is ecotoxic to terrestrial vertebrates

2.2 GHS Classification

- Acute toxicity, Oral (Category D)
- Skin corrosion (Category B)
- Serious eye damage (Category A)
- Aquatic toxicity (Acute or Chronic) (Category A)

2.3 GHS Label elements, including precautionary statements



Pictogram

Signal word **Danger**

Hazard statement(s)

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention

- P260 Do not breathe dust or mist.

P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/ physician.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.

Storage

P405 Store locked up.

Disposal

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

2.4 Other hazards - none

Hazard Classification Australia:

Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Hazard statement codes:

H290 May be corrosive to metals.
H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H333 May be harmful if inhaled.
H400 Very toxic to aquatic life.
H432 Toxic to terrestrial vertebrates.

Precautionary statement codes - Prevention:

P102 Keep out of reach of children. -This statement applies only where the substance is available to the general public.
P104 Read Safety Data Sheet before use.
P234 Keep only in original container.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment. -This statement does not apply where this is the intended use.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement codes - Response:

P101 If medical advice is needed, have product container or label at hand. -This statement applies only where the substance is available to the general public.
P310 Immediately call a POISON CENTER or doctor/physician.

P330 Rinse mouth.
 P331 Do NOT induce vomiting.
 P390 Absorb spillage to prevent material damage.
 INHALATION:
 P304+P312 Call a POISON CENTER or doctor/physician if you feel unwell.
 P304+P340 Remove to fresh air and keep at rest in a position comfortable for breathing.
 P391 Collect spillage.
 INGESTION:
 P301+P310 Immediately call a POISON CENTER or doctor/physician.
 P301+P330+P331 Rinse mouth. Do NOT induce vomiting.
 EYES:
 P305+P351+P338 Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 SKIN:
 P303+P361+P353 Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P363 Wash contaminated clothing before reuse.
 Precautionary statement codes - Storage:
 P405 Store locked up.
 P406 Store in corrosive resistant/ container with a resistant inner liner.

Precautionary statement codes - Disposal:
 P501 In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided. See Section 13 for disposal details.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion
	Zinc Chloride	7646-85-7	100 %

4. FIRST AID MEASURES

Inhalation	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing. Seek immediate medical attention.
Ingestion	Do NOT induce vomiting. Wash out mouth with water and give plenty of water to drink. Seek immediate medical attention.
Skin	Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before reuse or discard. Seek immediate medical attention.
Eye	If contact with the eyes occurs, wash with copious amounts of water holding eyelids open. Take care not to rinse contaminated water into the non-affected eye. Seek immediate medical attention.
First Aid Facilities	Eye wash station, safety shower and normal washroom facilities.
Advice to Doctor	Treat symptomatically.
Other Information	For advice, contact a Poisons Information Centre (Phone eg Australia 131 126; New Zealand 0800 764 766) or a doctor (at once).

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Foam, carbon dioxide or dry powder fire extinguishers.
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Hazards from Combustion Products	Under fire conditions this product may emit toxic and/or irritating fumes.
Specific Hazards	This product is non combustible. However heating can cause expansion or decomposition leading to violent rupture of containers.
Hazchem Code	2X
Precautions in connection with Fire	Fire-fighters should wear full protective clothing and self contained breathing apparatus (SCBA) operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Remove sources of ignition. Wear appropriate personal protective equipment and clothing to prevent exposure. Evacuate all unprotected personnel. Avoid dust generation by collecting the material using vacuum and transfer into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to 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.
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7. HANDLING AND STORAGE

Precautions for Safe Handling	Corrosive solid. Attacks skin and eyes. Causes burns. Wear suitable protective clothing, gloves and eye/face protection when mixing and using. Use in designated areas with adequate ventilation. Avoid breathing in dust. Keep containers closed when not in use. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands after handling, and before eating, drinking, smoking or using the toilet facilities.
Conditions for Safe Storage	Store in a cool dry well-ventilated area. Store away from oxidising agents and bases/acids. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Provide a catch-tank in a bunded area. Store in original packages as approved by manufacturer. For information on the design of the storeroom, reference should be made to Australian Standard AS 3780-2008: The storage and handling of corrosive substances. Reference should also be made to all State and Federal regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards	<p>No exposure value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC), Australia or the Occupational Safety and Health Service (OSH) of the New Zealand Department of Labour. However, the available exposure limits for ingredients are listed below:</p> <p>Australian National Occupational Health And Safety Commission (NOHSC) Exposure Standards: Substance TWA STEL ppm mg/m³ ppm mg/m³ Zinc Chloride - 1 - 2</p> <p>New Zealand Occupational Safety and Health Service (OSH) Workplace Exposure Standards: Substance TWA STEL ppm mg/m³ ppm mg/m³ Zinc Chloride - 1 - 2</p> <p>TWA - the Time-Weighted Average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life. STEL (Short Term Exposure Limit) - the average airborne concentration over a 15-minute</p>
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period, which should not be exceeded at any time during a normal eight-hour workday.

Biological Limit

Values No Biological limit available.

Engineering Controls Use with good general ventilation. If dusts are produced local exhaust ventilation should be used.

Respiratory Protection If engineering controls are not effective in controlling airborne exposure then respiratory protective equipment should be used suitable for protecting against airborne contaminants. Final choice of appropriate breathing protection is dependant upon actual airborne concentrations and the type of breathing protection required will vary according to individual circumstances. Expert advice may be required to make this decision. 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.

Eye Protection Safety glasses with side shields, goggles or full-face shield as appropriate recommended. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection Suitable work wear should be worn to protect personal clothing, eg cotton overalls buttoned at neck and wrist. When large quantities are handled the use of plastic aprons and rubber boots is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance White deliquescent crystals or powder.

Odour Not available.

Melting Point 290°C

Boiling Point 732°C

Solubility in Water Soluble.

Specific Gravity 2.91 (25°C)

pH Value Not available.

Vapour Pressure 1 mm (428°C)

Vapour Density (Air=1) Not available.

Flash Point Not applicable.

Flammability Non combustible material

Auto-Ignition Temperature Not applicable.

Flammable Limits - Lower Not applicable.

Flammable Limits - Upper Not applicable.

Molecular Weight 136.28

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Extremes of temperature and direct sunlight.
Incompatible Materials	Strong oxidising agents and potassium.
Hazardous Decomposition Products	Thermal decomposition may result in the release of toxic and/or irritating fumes and gases including zinc oxide and chloride fumes.
Hazardous Reactions	Will react with incompatibles.
Hazardous Polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information	No toxicology data available for this product.
Inhalation	Dust generated will cause irritation with possible burns to the mucous membrane and upper airways. Symptoms may include coughing, lesions of the nasal septum, severe pain and may lead to permanent tissue scarring.
Ingestion	Harmful if swallowed. Ingestion of this product can cause irritation to the mouth, throat, oesophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea. Ingestion of this product will cause nausea, vomiting, abdominal pain and chemical burns to the mouth, throat and stomach.
Skin	Causes burns. Corrosive to the skin. Skin contact can cause redness, itching, irritation, severe pain and chemical burns with resultant tissue destruction.
Eye	Corrosive to eyes - contact can cause corneal burns. Contamination of eyes can result in permanent injury. Eye contact with vapour or liquid will cause stinging, blurring tearing, severe pain and possible permanent eye damage and blindness.
Chronic Effects	So far as can be determined, the continued administration of zinc salts in small doses has no effect in man except those of of disordered digestion and constipation. This material is considered, experimentally, to cause neoplasms, i.e. non-metastasing abnormal or new growths.
Other Information	Exposure to Zinc Chloride may lead to 'metal-fume fever', a flu-like illness which causes a metallic taste in the mouth, throat irritation and dry cough.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Persistence / Degradability	No data is available for this material.
Mobility	No data is available for this material.
Environment Protection	Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

Disposal Considerations	Product Disposal: Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service. The product should be rendered non-hazardous before being sent to a licensed landfill facility.
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Do not dispose directly into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected.

The disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the ERMA New Zealand website under specific group standards.

Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed.

Do not dispose into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected.

In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the ERMA New Zealand website under specific group standards.

Container Disposal:

The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service.

Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous.

In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

14. TRANSPORT INFORMATION

Transport Information

Australia:

This material is classified as a Class 8 (Corrosive Substances) Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).

Class 8 Dangerous Goods are incompatible in a placard load with any of the following:

- Class 1, Explosives
- Division 4.3, Dangerous When Wet Substances
- Division 5.1, Oxidising Agents
- Division 5.2, Organic Peroxides
- Class 6, Toxic or Infectious Substances, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids
- Class 7, Radioactive Substances

and are incompatible with food and food packaging in any quantity.

Strong acids must not be loaded in the same freight container or on the same vehicle with strong alkalis. Packing Group I and II acids and alkalis should be considered as strong.

New Zealand:

This material is classified as a Class 8 Corrosive Substance according to NZS 5433:2007 Transport of Dangerous Goods on Land.

Must not be loaded in the same freight container or on the same vehicle with:

- Class 1, Explosives
- Class 5.1, Oxidising substances
- Class 5.2, Organic peroxides
- Class 7, Radioactive materials unless specifically exempted

And are incompatible with food and food packaging in any quantity.

Note 1: Cyanides (Class 6.1) must not be loaded in the same freight container or on the same vehicle with acids (Class 8).

Note 2: Strong acids must not be loaded in the same freight container or on the same vehicle with strong alkalis. Packing Group I and II acids and alkalis should be considered as

strong.

Must not be loaded with in the same freight container; and on the same vehicle must be separated horizontally by at least 3 metres unless all but one are packed in separate freight containers with:

- Class 4.3, Dangerous when wet substances

Goods of packing group II or III may be loaded in the same freight container or on the same vehicle if transported in segregation devices with:

- Class 4.3, Dangerous when wet substances

- Class 5.1, Oxidising substances

- Class 5.2, Organic peroxides

And are incompatible with food and food packaging in any quantity.

U.N. Number	2331
Proper Shipping Name	ZINC CHLORIDE, ANHYDROUS
DG Class	8
Hazchem Code	2X
Packaging Method	3.8.8
Packing Group	III
EPG Number	8A1
IERG Number	37

15. REGULATORY INFORMATION

Regulatory Information	Australia: Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia. Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
Poisons Schedule	S6
National and or International Regulatory Information	New Zealand: Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001. All components of this product are listed on the New Zealand Inventory of Chemicals (NZIoC) or exempted. HSNO (CCID) Name: Zinc chloride
Hazard Category	Harmful,Corrosive,Dangerous for the environment

16. Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages

howsoever arising, even if the company has been advised of the possibility of such damages.

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