

# SAFETY DATA SHEET

## 1. IDENTIFICATION

**Product Name:** SPIRITS OF SALT 25%

**Other Names:** Hydrochloric Acid 25%, Muriatic Acid

**Recommended Use:** Brick cleaning, concrete cleaning, surface rust removal.

**Supplier:** TMK Packers Ltd  
**Address:** 22 Trugood Drive, East Tamaki, Auckland 2013  
PO Box 258 031, Botany, Auckland 2163

**Telephone:** (+64) 9 273 3753  
**Facsimile:** [Website: www.tmkpackers.co.nz](http://www.tmkpackers.co.nz)

**Emergency phone:** 0800 273327 (TMK Packers Ltd 24 Hr)  
**National Poisons Centre:** 0800 POISON [0800 764 766]

## 2. HAZARDS IDENTIFICATION

### Hazardous Nature:

This product is classified as hazardous under GHS (7th revised edition) in accordance with the New Zealand Hazardous Substances (Hazard Classification) Notice 2020.

### GHS Classifications:

Corrosive to metals Category 1, Acute oral toxicity Category 4, Skin corrosion Category 1B, Serious eye damage Category 1

### GHS Pictograms



### Signal Word

**DANGER**

### Hazard Statements

H290 May be corrosive to metals.  
H302 Harmful if swallowed  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.

### Precautionary Statements

P234 Keep only in original container.  
P260 Do not breathe fume/gas/mist.  
P264 Wash hands thoroughly after handling



P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves and eye protection.

#### Response Statements

P310 Immediately call a POISON CENTER or doctor/physician.

P321 Specific treatment (see label).

P330 Rinse mouth.

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material-damage.

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): Take off immediately all contaminated clothing. Rinse skin with water.

P304 + P340 IF INHALED: Remove 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.

#### Storage Statements

P405 Store locked up.

P406 Store in corrosion resistant/ container with a resistant inner liner.

#### Disposal Statements:

P501: Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

### 3. COMPOSITION INFORMATION

Chemical Ingredient	CAS No.	Proportion (%v/v)
Hydrochloric acid	7647-01-0	<=25
Water	7732-18-5	balance

### 4. FIRST AID MEASURES

**For advice, contact National Poisons Centre (Phone New Zealand: 0800 764 766) or a doctor.**

#### Description of first aid measures

##### Inhalation

If fumes or combustion products are inhaled remove from contaminated area.

Lay patient down. Keep warm and rested.

Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.

Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

Transport to hospital, or doctor, without delay.

##### Skin/Hair Contact

Immediately flush body and clothes with large amounts of water, using safety shower if available.

Quickly remove all contaminated clothing, including footwear.



Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.

Transport to hospital, or doctor.

### **Eye Contact**

Immediately hold eyelids apart and flush the eye continuously with running water.

Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Transport to hospital or doctor without delay.

Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

### **Ingestion**

For advice, contact a Poisons Information Centre or a doctor at once.

Urgent hospital treatment is likely to be needed.

If swallowed do NOT induce vomiting.

If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

Observe the patient carefully.

Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.

Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.

Transport to hospital or doctor without delay.

### **Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

For acute or short term repeated exposures to strong acids:

- Airway problems may arise from laryngeal edema and inhalation exposure. Treat with 100% oxygen initially.
- Respiratory distress may require cricothyroidotomy if endotracheal intubation is contraindicated by excessive swelling
- Intravenous lines should be established immediately in all cases where there is evidence of circulatory compromise.
- Strong acids produce a coagulation necrosis characterised by formation of a coagulum (eschar) as a result of the dessicating action of the acid on proteins in specific tissues.

#### **INGESTION:**

- Immediate dilution (milk or water) within 30 minutes post ingestion is recommended.
- DO NOT attempt to neutralise the acid since exothermic reaction may extend the corrosive injury.
- Be careful to avoid further vomit since re-exposure of the mucosa to the acid is harmful. Limit fluids to one or two glasses in an adult.
- Charcoal has no place in acid management.
- Some authors suggest the use of lavage within 1 hour of ingestion.

#### **SKIN:**

- Skin lesions require copious saline irrigation. Treat chemical burns as thermal burns with non-adherent gauze and wrapping.



- Deep second-degree burns may benefit from topical silver sulfadiazine.

EYE:

- Eye injuries require retraction of the eyelids to ensure thorough irrigation of the conjunctival cul-de-sacs. Irrigation should last at least 20-30 minutes. DO NOT use neutralising agents or any other additives. Several litres of saline are required.
- Cycloplegic drops, (1% cyclopentolate for short-term use or 5% homatropine for longer term use) antibiotic drops, vasoconstrictive agents or artificial tears may be indicated dependent on the severity of the injury.
- Steroid eye drops should only be administered with the approval of a consulting ophthalmologist).

## 5. FIRE FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing firefighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

### Suitable Extinguishing Media

Water spray, water fog or fine mist, alcohol foam.

Dry chemical powder, BCF (where regulations permit).

### Specific Hazards Arising from the Material

Fire Incompatibility: None known

### Advice for firefighters

#### Fire Fighting

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
- Use fire fighting procedures suitable for surrounding area.

#### Fire/Explosion Hazard

- Non combustible.
- Not considered to be a significant fire risk.
- Acids may react with metals to produce hydrogen, a highly flammable and explosive gas.
- Heating may cause expansion or decomposition leading to violent rupture of containers.

Decomposition may produce toxic fumes of: hydrogen chloride

Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

**Hazchem Code:** 2R

## 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, protective equipment and emergency procedures

See section 8

### Environmental Precautions

See section 12





## **Methods and Materials for Containment**

### **Minor Spills**

- Drains for storage or use areas should have retention basins for pH adjustments and dilution of spills before discharge or
- disposal of material.
- Check regularly for spills and leaks.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.

### **Major spills**

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## **7. HANDLING AND STORAGE**

### **Precautions for safe handling**

#### **Safe handling**

Contains low boiling substance:

Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.

- Check for bulging containers.
- Vent periodically
- Always release caps or seals slowly to ensure slow dissipation of vapours
- DO NOT allow clothing wet with material to stay in contact with skin
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- WARNING: To avoid violent reaction, **ALWAYS** add material to water and **NEVER** water to material.

#### **Other information**

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.

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

#### **Suitable container**

- DO NOT use aluminium or galvanised containers



- Check regularly for spills and leaks
- Lined metal can, lined metal pail/ can.
- Plastic pail.
- Polyliner drum.
- Packing as recommended by manufacturer.

For low viscosity materials

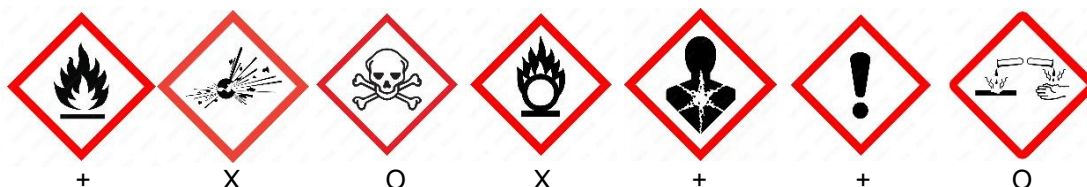
- Drums and jerricans must be of the non-removable head type.
- Where a can is to be used as an inner package, the can must have a screwed enclosure.

For materials with a viscosity of at least 2680 cSt. (23 deg. C) and solids (between 15 C deg. and 40 deg C.):

- Removable head packaging;
- Cans with friction closures and
- low pressure tubes and cartridges
- may be used.

#### Suitable incompatibility

- Reacts vigorously with alkalis
- Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air.



X — Must not be stored together

O — May be stored together with specific preventions

+ — May be stored together

*Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.*

## 8. EXPOSURE CONTROLS: PERSONAL PROTECTION

### Control parameters

#### Occupational Exposure Limits (OEL)

#### INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	hydrochloric acid	Hydrogen chloride	Not Available	Not Available	5 ppm / 7.5 mg/m3	Not Available

#### Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
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hydrochloric acid	Not Available	Not Available	Not Available
hydrochloric acid	1.8 ppm	22 ppm	100 ppm

Ingredient	Original IDLH	Revised IDLH
hydrochloric acid	50 ppm	Not Available
water	Not Available	Not Available

## **Exposure controls**

### **Appropriate engineering controls**

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

### **Individual protection measures, such as personal protective equipment**

#### **Eye and face protection**

- Safety glasses with unperforated side shields may be used where continuous eye protection is desirable, as in laboratories; spectacles are not sufficient where complete eye protection is needed such as when handling bulk-quantities, where there is a danger of splashing, or if the material may be under pressure.
- Chemical goggles. Whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted. [AS/NZS 1337.1, EN166 or national equivalent]
- Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes; these afford face protection.

#### **Skin protection**

See Hand protection below

#### **Hands/feet protection**

- Elbow length PVC gloves
- When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Personal hygiene is a key element of effective hand care.

#### **Body protection**

See Other protection below

#### **Other protection**

- Overalls.



- PVC Apron.
- PVC protective suit may be required if exposure severe.
- Eyewash unit.

## **Recommended material(s)**

### **GLOVE SELECTION INDEX**

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the computer-generated selection:

Hydrochloric Acid 10-36%

Material	CPI
BUTYL	A
NEOPRENE	A
BUTYL/NEOPRENE	C
HYPALON	C
NAT+NEOPR+NITRILE	C
NATURAL RUBBER	C
NATURAL+NEOPRENE	C
NEOPRENE/NATURAL	C
NITRILE	C
NITRILE+PVC	C
PE/EVAL/PE	C
PVA	C
PVC	C
SARANEX-23	C
VITON	C
VITON/NEOPRENE	C

\* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

\* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

## **Respiratory protection**

Type B-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant.





Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	B-AUS / Class1 P2	
up to 50	1000		B-AUS / Class 1 P2
up to 50	5000	Airline *	
up to 100	5000		B-2 P2
up to 100	10000		B-3 P2
100+			Airline**

\* - Continuous Flow \*\* - Continuous-flow or positive pressure demand A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO<sub>2</sub>), G = Agricultural chemicals, K = Ammonia(NH<sub>3</sub>), Hg = Mercury, NO = Oxides of nitrogen, MB = methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

76b-p()

#### Ansell Glove Selection

Glove — In order of recommendation
AlphaTec 02-100
AlphaTec® Solvex® 37-185
AlphaTec® 38-612
AlphaTec® 58-008
AlphaTec® 58-530B
AlphaTec® 58-530W
AlphaTec® 58-735
AlphaTec® 79-700
AlphaTec® Solvex® 37-675
DermaShield™ 73-711

The suggested gloves for use should be confirmed with the glove supplier.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical value
Appearance	-	Colourless to yellow, clear acidic liquid with characteristic odour; mixes with water.
Odour	-	Not Available
Odour threshold	-	Not available
Melting Point/Freezing Point	°C	-46.2
Boiling Point/ Range	°C	108.6
Flash Point	°C	Not available
Flammability	-	Not applicable
Explosive Limits (LEL – UEL)	%	Not applicable
Vapour Pressure @20.0°C	kPa	17 mmHg
Vapour Density (Air = 1)	-	Not available

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Autoignition Temperature	°C	Not available
Decomposition Temperature	°C	Not available
pH	-	Not available
Kinematic Viscosity	cSt	Not available
Solubility with Water	% w/w	Miscible
Partition Coefficient: n-octanol/water	-	Not available
Percent Volatiles	%	Not available

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

## 10. STABILITY AND REACTIVITY

### Reactivity

See section 7.

### Chemical Stability

Contact with alkaline material liberates heat

### Conditions to Avoid

See section 7.

### Incompatible materials

See section 7.

### Hazardous Decomposition Products

See section 5.

### Hazardous Reactions

See section 7.

## 11. TOXICOLOGICAL INFORMATION

### Acute Effects

#### *Ingestion*

Ingestion of acidic corrosives may produce burns around and in the mouth, the throat and oesophagus. Immediate pain and difficulties in swallowing and speaking may also be evident.

#### *Inhalation*

The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

Corrosive acids can cause irritation of the respiratory tract, with coughing, choking and mucous membrane damage. There may be dizziness, headache, nausea and weakness.

Inhalation of quantities of liquid mist may be extremely hazardous, even lethal due to spasm, extreme irritation of larynx and bronchi, chemical pneumonitis and pulmonary oedema.

Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may produce toxic effects; these may be fatal.

Inhalation of the vapour is hazardous and may even be fatal



### **Skin Contact**

Skin contact with acidic corrosives may result in pain and burns; these may be deep with distinct edges and may heal slowly with the formation of scar tissue.

Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.

Open cuts, abraded or irritated skin should not be exposed to this material

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.

Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

### **Eye Contact**

If applied to the eyes, this material causes severe eye damage.

Direct eye contact with acid corrosives may produce pain, tears, sensitivity to light and burns. Mild burns of the epithelia generally recover rapidly and completely.

### **Chronic Effects**

Repeated or prolonged exposure to acids may result in the erosion of teeth, swelling and/or ulceration of mouth lining. Irritation of airways to lung, with cough, and inflammation of lung tissue often occurs.

Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems.

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Chronic minor exposure to hydrogen chloride (HCl) vapour or fume may cause discolouration or erosion of the teeth, bleeding of the nose and gums; and ulceration of the mucous membranes of the nose. Workers exposed to hydrochloric acid suffered from stomach inflammation and a number of cases of chronic bronchitis (airway inflammation) have also been reported. Repeated or prolonged exposure to dilute solutions of hydrogen chloride may cause skin inflammation.

### **Toxicological Information**

#### **Hydrochloric Acid 10-36%**

TOXICITY	IRRITATION
Not Available	Not Available

#### **Hydrochloric Acid**

TOXICITY	IRRITATION
dermal (mouse) LD50: 1449 mg/kg[2]	Eye (rabbit): 5mg/30s - mild
Oral (Rat) LD50: 900 mg/kg[2]	Eye: adverse effect observed (irritating)[1]
	Skin: adverse effect observed (corrosive)[1]
	Skin: adverse effect observed (irritating)[1]

#### **Water**

TOXICITY	IRRITATION
Oral (Rat) LD50: >90000 mg/kg[2]	Not Available

[1]. Value obtained from Europe ECHA Registered Substances - Acute toxicity

[2]. Value obtained from manufacturer's SDS.



Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

### Hydrochloric Acid

Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to an non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia.

For acid mists, aerosols, vapours

Test results suggest that eukaryotic cells are susceptible to genetic damage when the pH falls to about 6.5. Cells from the respiratory tract have not been examined in this respect. Mucous secretion may protect the cells of the airway from direct exposure to inhaled acidic mists (which also protects the stomach lining from the hydrochloric acid secreted there).

The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The substance is classified by IARC as Group 3:

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.

### Hydrochloric Acid

No significant acute toxicological data identified in literature search.

**Acute Toxicity:** ✓

**Skin Corrosion/Irritation:** ✓

**Serious Eye damage/irritation:** ✓

**Respiratory or Skin Sensitisation:** ✗

**Germ cell mutagenicity:** ✗

**Carcinogenicity:** ✗

**Reproductive Toxicity:** ✗

**Specific Target Organ Toxicity (STOT) – Single Exposure:** ✗

**Specific Target Organ Toxicity (STOT) – Repeated Exposure:** ✗

**Aspiration Hazard:** ✗

✓ – Data either not available or does not fill the criteria for classification

✗ – Data available to make classification

## 12. ECOLOGICAL INFORMATION

### Toxicity

#### Hydrochloric Acid 10-36%

Endpoint	Test Duration (hr)	Species	Value	Source
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Not Available	Not Available	Not Available	Not Available	Not Available
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### Hydrochloric Acid

Endpoint	Test Duration (hr)	Species	Value	Source
EC50(ECx)	9.33h	Fish	0.51mg/L	4
LC50	96h	Fish	334.734mg/L	4

### Water

Endpoint	Test Duration (hr)	Species	Value	Source
Not Available	Not Available	Not Available	Not Available	Not Available

### Ecotoxicity:

The tolerance of water organisms towards pH margin and variation is diverse. Recommended pH values for test species listed in OECD guidelines are between 6.0 and almost 9. Acute testing with fish showed 96h-LC50 at about pH 3.5

Prevent, by any means available, spillage from entering drains or water courses.

DO NOT discharge into sewer or waterways.

### Persistence/Degradability

#### Hydrochloric Acid

Persistence: Water/Soil	Persistence: Air
Low	Low

### Water

Persistence: Water/Soil	Persistence: Air
Low	Low

### Bioaccumulative Potential

#### Hydrochloric Acid

Bioaccumulation
LOW (LogKOW = 0.5392)

### Mobility in Soil

#### Hydrochloric Acid

Mobility
LOW (KOC = 14.3)

## 13. DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

#### Product / Packaging disposal

- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

Otherwise:



- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- Where possible retain label warnings and SDS and observe all notices pertaining to the product.
- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Treat and neutralise at an approved treatment plant. Treatment should involve: Neutralisation with soda-ash or soda-lime followed by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material).

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

### **Waste Treatment Methods**

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled.

The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous.

## **14. TRANSPORT INFORMATION**

UN Number: 1789  
Shipping name: HYDROCHLORIC ACID  
Class: 8  
Packing group: II  
Hazchem code: 2R

### **Dangerous Goods Segregation**

This product is classified as Dangerous Goods Class 8, packing group II.

Please consult NZS 5433:2020 Transport of Dangerous Goods on Land for information.



### **Environmental Hazards**

**Marine Pollutant:** No

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### Special Precautions

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### Additional Information

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## 15. REGULATORY INFORMATION

**Country/ Region:** New Zealand  
**Inventory:** NZIoC)  
**Status:** Listed

**EPA New Zealand Approval Code:** HSR001565: Hydrochloric acid, >10-25% aqueous solution

## 16. OTHER INFORMATION

**Issue number:** 2  
**Date of issue:** 25<sup>th</sup> March, 2025  
**Reasons for Issue:** Update GHS classifications  
**Replaces issue dated:** 18<sup>th</sup> April 2024

### **Abbreviations:**

ACGIH	American Conference of Governmental Industrial Hygienists
AS/NZS	Standards Australia & Standards New Zealand
BCF	Bioconcentration Factor
BEI	Biological Exposure Index
CAS	Chemical Abstracts Service
CCID	Chemical Classification and Information Database
EC50	Effective Concentration, 50 per cent
EPA	Environmental Protection Authority
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
GHS 7	Globally Harmonised System of Classification and Labelling of Chemicals, 7th revised edition, 2017, published by the United Nations
HSNO	Hazardous Substances and New Organisms Act 1996
HSWA	Health and Safety at Work Act 2015
IARC	International Agency for Research on Cancer
IC50	Half Maximal Inhibitory Concentration
LC50	Lethal Concentration, 50 per cent
LD50	Lethal Dose, 50 per cent
LEL	Lower Explosive Limit
LOAEL	Lowest-observed-adverse-effect level N/R: Not Regulated
NOAEL	No-observed-adverse-effect-level
NOEC	No Observed Effect Concentration
NZIoC	New Zealand Inventory of Chemicals
NZS 5433	New Zealand Standard Transport of Dangerous Goods on Land
OECD	Organisation for Economic Co-operation and Development
STEL	Short-Term-Exposure Limit
TLV	Threshold Limit Value
TWA	Time-Weighted Average
UEL	Upper Explosive Limit
WES	Workplace Exposure Limit

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#### References:

- Supplier Safety Data Sheets
- EPA CCID <https://www.epa.govt.nz/database-search/chemical-classification-and-information-database-ccid/>
- Workplace Exposure Standards and Biological Exposure Indices. 12th Edition, published by WorkSafe New Zealand November 2020. <https://worksafe.govt.nz/topic-and-industry/work-related-health/monitoring/exposure-standards-and-biological-exposure-indices>
- US NLM ChemIDPlus: <https://chem.nlm.nih.gov/chemidplus/>
- OECD eChemPortal Substance Search <https://www.echemportal.org/echemportal/>

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact TMK Packers Limited.

END OF SAFETY DATA SHEET

