



SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1: Identification of the Substance/Mixture and of the Supplier

Product: **Spirit of Salts // Hydrochloric Acid 24%**
Product Use: Precursor for generation of chlorine dioxide gas used in water treatment.
Restriction of Use: Refer to Section 15

Company Details: **Marketing Chemicals Ltd**
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Emergency No: **+64 274 340 990 (24 hours)**
0800 764 766 (National Poison Centre)

Date of SDS Preparation: 24 August 2026

Section 2: Hazard Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: **HSR001557**

Pictograms:



Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute inhalation toxicity Cat. 2	H330	Fatal if inhaled.
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Acute dermal toxicity Cat. 4	H312	Harmful in contact with skin.
Corrosive to metals Cat. 1	H290	May be corrosive to metals.
Skin corrosion Cat. 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage Cat. 1	H318	Causes serious eye damage.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P234	Keep only in original packaging.
P260	Do not breathe dust, fumes, gas, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective clothing [as detailed in SDS Section 8].
P284	[In case of inadequate ventilation] Wear respiratory protection.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
P362+P364	Take off contaminated clothing and wash before reuse.

Storage Code	Storage Statement
P405	Store locked up.
P406	Store in corrosive resistant/... container with a resistant inner liner.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
Disposal Code	Disposal Statement
P501	Refer to Section 13.

Section 3: Composition/Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Hydrochloric Acid	24%	7647-01-0
Water	To bal	7732-18-5

Section 4: First Aid Measures

Routes of Exposure:

If in Eyes	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
If on Skin	Take off contaminated clothing and wash before reuse. Wash off immediately with soap and plenty of water. Immediately call a POISON CENTER or doctor/physician.
If Swallowed	Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get immediate medical attention.
If Inhaled	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Poison Centre or doctor/physician for advice. Give artificial respiration if victim is not breathing.

Most important symptoms and effects, both acute and delayed

Symptoms: Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). Burning. Coughing and/ or wheezing. Difficulty in breathing.

Ingestion	Harmful if swallowed.
Inhalation	Fatal if inhaled.
Skin	Harmful if in contact with skin. Causes skin burns.
Eyes	Causes serious eye damage.

Notes to Doctor: Can cause corneal burns. Treat symptomatically.

Product Name: **Spirit of Salts / Hydrochloric Acid 24%** SDS Prepared by: Technical Compliance Consultants NZ Ltd
Date of SDS: 24 August 2026 Tel: 64 9 475 5240 www.techcomp.co.nz

Section 5: Fire Fighting Measures

Hazard Type	Non-Flammable
Hazards from products	No data available.
Suitable Extinguishing media	Dry chemical, CO2, water spray or regular foam.
Precautions for firefighters and special protective clothing	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.
HAZCHEM CODE	2R

Section 6: Accidental Release Measures

Emergency procedures/Environmental precautions:

Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Use personal protective equipment as required. Evacuate personnel to safe areas. Do not touch or walk through spilled material. Wash thoroughly after handling. Wear protective gloves/clothing and eye/face protection. Wear appropriate respirator when ventilation is inadequate.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Neutralise residues with lime or soda ash. After cleaning, flush away traces with water. Dispose as per Section 13.

Section 7: Handling and Storage

Handling:

- Read carefully and follow all instructions.
- Keep only in original packaging.
- Do not breathe fumes, gas, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Wear protective clothing [as detailed in SDS Section 8].
- Wear respiratory protection.
- Avoid contact with skin, eyes or clothing.
- Take off contaminated clothing and wash before reuse.
- Regular cleaning of equipment, work area and clothing is recommended.

Storage:

- Keep away from food/feedstuffs and incompatible materials: Strong alkalis. Oxidizing agents. Cyanides. Metals. Sodium hypochlorite.
- Store locked up.
- Store in corrosive resistant/... container with a resistant inner liner.
- Store in a cool, well-ventilated place.
- Keep container tightly closed.
- Do not store in galvanized containers.

Section 8: Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance		TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Hydrogen chloride [7647-01-0]	Ceiling	2	2.98	-	-

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices FEB 2025 15TH EDITION.

Personal Protection Equipment



Engineering Controls:

Ensure that eyewash stations and safety showers are close to the workstation location.
Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits.

Eye / Face Protection:

Tight sealing safety goggles. If splashes are likely to occur: Face protection shield.

Body Protection:

Wear elbow-length impervious gloves. Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Boots

Respiratory Protection:

If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Section 9: Physical and Chemical Properties

Appearance	Liquid
Colour	Clear – Colourless to slightly yellow
Odour	Pungent
Odour Threshold	Not available
Molecular Formula	Not available
pH	<1
Boiling Point	98 °C (for 28% concentration)
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Relative Density	ca. 1.06 (for 26% concentration)
Solubility in Water	Miscible with water
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available
Particle Characteristics	Not available
Volatile %	Not available

Section 10: Stability and Reactivity

Stability of the Substance:	Stable in normal conditions.
Possibility of hazardous Reactions:	Corrosive to metals. Reacts with strong alkalis. Reacts with oxidising agents and sodium hypochlorite liberating toxic chlorine gas.
Conditions to avoid:	Do not contaminate food or feed stuffs. Contact with foodstuffs.
Materials to avoid:	Strong alkalis. Oxidizing agents. Cyanides. Metals. Sodium hypochlorite.
Hazardous Decomposition Products:	Hydrogen chloride.

Section 11: Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed. Can burn mouth, throat, and stomach.
Dermal	Harmful in contact with skin.
Inhalation	Fatal if inhaled.
Eye	Causes serious eye damage.
Skin	Causes skin burns.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.
Chronic	Repeated exposure to low levels of hydrochloric acid may produce discolouration and erosion of teeth and ulceration of the nasal passages.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat) 1 h
Water	> 90 mL/kg (Rat)	-	-

Section 12: Ecotoxicological Information

Not hazardous to the environment.

Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Section 13: Disposal Considerations

Disposal Method: Dispose of product in packaging/container in a way that is consistent with the Hazardous Substances (Disposal) Notice 2017 and the Act, and Hazardous Substances (Amendments and Revocations) Notice 2020.
Treat the chemical using a method that changes the characteristics or composition of the chemical so that the chemical is no longer a hazardous chemical; or export the chemical from New Zealand as waste.
Class 6 and 8 chemicals – may be discharged into the environment if a tolerable exposure limit has been set for the substance (or a component of that chemical); and

the discharge does not, after reasonable mixing, result in the concentration of the substance in an environmental medium exceeding the tolerable exposure limit. If there is not tolerable exposure limit for the substance, then it may only be discharged into the environment if the substance is very rapidly converted to substances that are not hazardous substances..

Precautions:

For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from.

Packages may only be reused or recycled if:

- the substance has a physical hazard other than corrosive to metal, and has been treated to remove any residual contents of the hazardous substance;
- or for substances that have a health or environmental hazard, or corrosive to metal, the contents of the residue in the package are below the threshold for the substance to be classified as hazardous in the Hazardous Substances (Hazard Classification) Notice 2020.

Section 14: Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020



Road, Rail, Sea and Air Transport

UN No	1789
Class - Primary	8
Packing Group	II
Proper Shipping Name	HYDROCHLORIC ACID
Marine Pollutant	No
Special Provisions	If the product's individual container is below 1L, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15: Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: **HSR001557**

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Exempt
Location Certificate	250 kg/L
Tracking Trigger Quantities	Any
Signage Trigger Quantities	250 kg/L
Emergency Response Plan	100 kg/L
Secondary Containment	100 kg/L
Restriction of Use	None known

Section 16: Other Information

Glossary

Cat

Category

EC₅₀

Median effective concentration.

EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices FEB 2025 15th edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

Marketing Chemicals Ltd has taken care in compiling this information. No liability is accepted directly or indirectly from its application as conditions of use are outside the Company's control. End users are obliged to conform to relevant Local Government regulations.

For General Information: Marketing Chemicals Ltd, Phone: +64 274 340 990

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