

V-GEN HPLUS

Chlorine Dioxide Precursor

Classified as: Hazardous according to the EPA Hazardous Substances (Minimum Degrees of Hazard) Notice 2017.

SECTION 1: SUBSTANCE AND SUPPLIER DETAILS

Product Name:	V-GEN HPLUS
Supplier:	Visentia Ltd 119 Carbine Road Mt Wellington Auckland 1060 New Zealand
Telephone:	+64 9 216 9824
Recommended Use:	Water Treatment Chemical
In Case of Emergency Contact:	0800 CHEMCALL (243 622)

SECTION 2: HAZARDS IDENTIFICATION

V-GEN HPLUS is classified as a Dangerous Good for Transport.

V-GEN HPLUS is classified as hazardous according to criteria in the EPA Hazardous Substances (Minimum Degrees of Hazards) Notice 2017.

Classified under the group standard "Water Treatment Chemicals (Corrosive) Group Standard 2017"

HSNO Approval Number: HSR002681

HSNO Classifications: 6.1D – Acutely toxic, oral
8.1A – Corrosive to metal
8.2B – Skin corrosive
8.3A – Corrosive to eyes
9.3C – Harmful to terrestrial vertebrates

GHS Classification: Acute toxicity oral – Category 4
Corrosive to metals – Category 1
Skin corrosion/irritation – Category 1B
Serious eye damage/eye irritation – Category 1
Notes: There is no GHS equivalent for ecotoxicity to terrestrial vertebrates.

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

H433 – Harmful to terrestrial vertebrates

GHS Pictograms:



Signal Word:

DANGER

Prevention Statements:

P102 – Keep out of reach of children.

P234 – Keep only in original container.

P260 – Do not breathe mist/vapours/spray.

P264 - Wash hands, exposed 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 Statements

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.

P363 – Wash contaminated clothing before re-use.

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.

P310 – Immediately call a POISON CENTER or doctor/physician.

P321 – Specific treatment (see first aid panel on this label).

P390 – Absorb spillage to prevent material damage.

Storage:

P405 – Store locked up.

P406 – Store in corrosive resistant container with a resistant inner liner.

Disposal:

P501 - In accordance with the EPA Hazardous Substances (Disposal) Notice 2017. Refer to Section 13 of this SDS.



SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Main Component	CAS Number	Concentration
Hydrochloric acid	7647-01-0	10-30%
Water	7732-18-5	Balance

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4: FIRST AID MEASURES

Workplace Facilities Required:	Eye wash and safety shower facilities should be provided.
If Inhaled:	Remove to fresh air. Lie patient down and keep warm and at rest. Apply artificial respiration if not breathing. Seek immediate medical attention.
In Contact with Eye:	Hold eyes open, flush with water for at least 15 minutes. Seek immediate medical attention.
In Contact with Skin:	Wash skin with plenty of water, while removing contaminated clothing and shoes. Wash contaminated clothing before re-use. Seek immediate medical attention.
If Swallowed:	DO NOT INDUCE VOMITING. Rinse mouth. Give small quantities of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention. If vomiting occurs, keep head below hips to prevent aspiration to lungs.
Advice to Doctor:	Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Fire/Explosion Hazard:	Product is not flammable or combustible.
Suitable Extinguishing Media:	Use water spray or fog, foam, dry chemical powder or carbon dioxide. Remove containers from path of fire if safe to do so. Cool exposed containers with water spray from a safe location.
Precautions in Connection with Fire:	May give off toxic and corrosive fumes in a fire. Fumes may contain hydrogen chloride. May react with metals to form hydrogen gas which is highly flammable.
Advice for firefighters:	Wear full firefighting gear and self-contained breathing apparatus. Prevent spills from entering drains and water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

An emergency response plan is required under Part 5 of the Health and Safety at Work (Hazardous Substances) Regulations 2017 when held in quantities greater than 1,000L.

Precautions:	Clear area of all unprotected personnel. Keep unnecessary and unprotected personnel from entering area. Avoid generating dust. Avoid release to the environment.
Suitable Protective Equipment:	Emergency responders must use personal protective equipment, including gloves, protective overalls and footwear, safety goggles or face shield and respiratory protection if there is a risk of inhaling dust.



Spill or Leak Procedures:	Contain the spill. Sweep up spills and place in a suitable, closable chemical waste container. Alternatively, an industrial vacuum cleaner may be used to collect spilled material. Ensure waste container is properly labelled.
Waste Disposal Methods:	Dispose of as per Section 13.
Emergency preparation:	Ensure there is appropriate and adequate personal protective equipment, trained personnel and clean up materials for management of accidental release.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling:	Avoid contact with skin and eyes. Do not breathe mist/vapour/spray. Use in a well-ventilated area. To avoid violent reactions always add product to water not water to product. Do not eat, drink or smoke when using this product. Remove contaminated clothing and wash hands and face before entering eating areas.
Storage:	Keep container tightly closed when not in use. Store in original container in a cool, dry, well-ventilated area. Keep away from food, drink and animal feed. Ensure storage area has suitable secondary containment.
Site Storage Requirements:	Site Signage will be required when quantities exceed 250L.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace Exposure Standards NZ:	Hydrogen chloride: Ceiling 5 ppm (7.5 mg/m ³)
Engineering Controls:	Eyewash facilities and safety showers should be provided in the work area where there is a risk of exposure to eyes and skin. Use in a well-ventilated area. If natural ventilation is insufficient consider engineering controls such as local exhaust ventilation to ensure workers are not exposed to levels exceeding the exposure standards.
Personal Protective Equipment:	Avoid contact with the skin and eyes. Avoid inhaling mist/vapours/spray.
Hand protection:	Wear protective gloves that are resistant to the product, e.g. PVC. Gloves should be elbow length. Refer to Australian and New Zealand Standard AS/NZS 2161 for protective gloves.
Skin and body protection:	Use protective overalls and PVC apron. Remove any contaminated clothing to avoid prolonged contact with the skin. Wash work clothes regularly. Refer to Australian and New Zealand Standard AS/NZS 4501 for occupational protective clothing.
Eye protection:	Use chemical safety goggles to protect eyes. When handling bulk quantities where there may be a risk of splashing, a face shield may also be used along with eye protection to protect the face. Refer to AS/NZS 1336 for suitable eye and face protection.
Respiratory protection:	Where there is inadequate ventilation and use results in the formation of mist/vapours/spray, use a respirator. Refer to AS/NZS 1715 and AS/NZS 1716 for suitable respiratory protection. A full-face respirator with cartridges suitable for acids is recommended.
Other information:	PPE selected must be impervious to the substance. Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating, drinking or smoking. Handle in accordance with safe industrial hygiene practices.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Description:	Liquid	Colour:	Clear, colourless
Odour:	Sharp, acidic	Odour Threshold:	Not available
pH (25°C):	< 1	Solubility (water, 25°C):	Miscible
Melting/Freezing point:	Not available	Boiling Point:	Not available
Flammability:	Non-flammable	Flash Point:	Not applicable
UEL/LEL:	Not applicable	Vapour Pressure (20°C):	Not available
Decomposition Temp:	Not available	Autoignition Temp:	Not available
Relative Density:	1.10 (water = 1)	Vapour Density:	Not available
Partition Coefficient:	Not available	Viscosity:	Not available
n-octanol/water			

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable under normal cool, dry storage conditions.
Reactivity:	Reacts exothermically with alkalis. May produce highly flammable hydrogen gas on contact with metals.
Conditions to Avoid:	Excessive heat. Contact with metals.
Incompatibility:	Incompatible with alkalis, oxidising agents, materials readily decomposed by acids such as cyanides, sulphides and carbonates.
Hazardous Decomposition:	Decomposition may result in formation of hydrogen chloride.

SECTION 11: TOXICOLOGICAL INFORMATION**Acute Exposure**

Acute Toxicity:	LD50 oral >300 - ≤ 2000 mg/kg LD50 dermal >5000 mg/kg LC50 inhalation >5 mg/L (dust or mist)
Inhalation:	Inhalation of spray/mist/vapour may be harmful. May damage mucous membranes.
Ingestion:	Harmful if swallowed. May cause gastrointestinal irritation, nausea and vomiting. May cause local tissue damage to areas of upper digestive tract including localised ulceration and gastrointestinal bleeding.
Skin Contact:	Corrosive to skin, causes chemical burns.
Eye Contact:	Corrosive to eyes.
Sensitiser:	Not expected to be a respiratory or contact sensitiser.

Chronic Exposure

Mutagen, Carcinogen, or Reproductive Toxicant	No known effects.
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Specific Target Organ Systemic Toxicity: No known effects.

Toxicity data is based on hazardous ingredient information and information in the EPA Chemical Classification and Identification Database.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: LC/EC₅₀ >100 mg/L. Not expected to be ecotoxic in the aquatic environment.
LD50 500 to ≤ 2000 mg/kg. Harmful to terrestrial vertebrates. Avoid losses to the environment wherever possible.

Persistence/degradability: Product is rapidly degradable.

Bio-accumulation: Not expected to bioaccumulate.

Mobility: Product is miscible in water.
Ecotoxicity data is based on hazardous ingredient information.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal: Recycle and reuse wherever possible. Waste product may be treated with soda ash or soda lime to neutralise it. Dispose of waste product via an approved waste disposal contractor.

Disposal of Packaging: Packaging may contain product residues and should be treated as hazardous. Empty containers may be decontaminated with a 5% aqueous sodium hydroxide solution, or soda ash, followed by water. Where possible return to supplier for reuse/recycling. Dispose of packaging via an approved waste disposal contractor.

SECTION 14: TRANSPORT INFORMATION

V-GEN HPLUS is classified as a Dangerous Good for transport in accordance with NZS5433:2012, IMDG or IATA.

Hazchem Code: 2R

Hazchem Pictograms:



NZS5433:2012: UN No: 1789
Proper Shipping Name: Hydrochloric Acid
Class: 8
Packing Group: II
Environmental hazard: Not applicable
Limited Quantity: 1L

IMDG: UN No: 1789
Proper Shipping Name: Hydrochloric Acid
Class: 8



IATA:

Packing Group: II
Marine Pollutant: No
EmS: F-A, S-B
Limited Quantity: 1L
UN No: 1789
Proper Shipping Name: Hydrochloric Acid
Class: 8
Packing Group: II
Environmental hazard: Not applicable
ERG Code: 8L
Special Provisions: A3, A803
Cargo Only: Packing Instructions – 855, Maximum Quantity/Pack – 30L
Passenger and Cargo: Packing Instructions – 851, Maximum Quantity/Pack – 1L
Passenger and Cargo Limited Quantity: Packing Instructions – Y840, Maximum Quantity/Pack – 0.5L

Ensure transportation methods prevent leakage from packages and collapsing loads.

SECTION 15: REGULATORY INFORMATION

Group Standard Allocation: Water Treatment Chemicals (Corrosive) Group Standard 2017

HSNO Approval Code: HSR002681

HSNO Classifications: 6.1D oral – Acutely toxic
8.1A – Corrosive to metals
8.2B – Skin corrosive
8.3A – Eye corrosive
9.3C – Harmful to terrestrial vertebrates

This substance triggers: Compliance Certificate – 250L
Certified Handler – N/A
Quantity to be secured when unattended – N/A
Emergency Response Plan – 1,000L
Secondary Containment – 1,000L
Signage – 250L

This substance is not required to be Tracked.

All workplace personnel handling this substance are required to be trained on the safe handling and PPE requirements for the hazards associated with this substance.

**SECTION 16: OTHER INFORMATION**

The information provided in this Safety Data Sheet relates only to the specific material designated herein. This Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products.

This substance is approved under HSNO for use as a water treatment chemical. All reasonable care has been taken to ensure that the information and advice contained herein are from sources believed to be reliable and to represent the most up-to-date knowledge available at the date given in Section 16. No liability is assumed for any damages related to the use or misuse of this substance.

All chemical materials may present unknown hazards as people have varying degrees of sensitivity to chemicals. Therefore, this product should be used with caution. The information herein is given in good faith, but no warranty, express or implied is made.

SDS Issued: 8/03/2019

Reason for Revision: Update to New Zealand regulatory requirements.

References: EPA NZ Chemical Classification and Information Database
EPA Guide: Assigning a Hazardous Substance to a Group Standard, 2014

END OF SAFETY DATA SHEET