

## V-GUARD 230 Alkalinity Builder

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

### SECTION 1: SUBSTANCE AND SUPPLIER DETAILS

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<b>Product Name:</b>	V-GUARD 230
<b>Supplier:</b>	Visentia Ltd 119 Carbine Road Mt Wellington Auckland 1060 New Zealand
<b>Telephone:</b>	+64 9 216 9824
<b>Recommended Use:</b>	Water Treatment Chemical
<b>In Case of Emergency Contact:</b>	0800 CHEMCALL (243 622)

### SECTION 2: HAZARDS IDENTIFICATION

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V-GUARD 230 is classified as a Dangerous Good for Transport.

V-GUARD 230 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"

<b>HSNO Approval Number:</b>	HSR002681
<b>HSNO Classifications:</b>	6.1D oral – Acutely toxic 6.1E dermal – Acutely toxic 8.1A – Corrosive to metals 8.2B – Skin corrosive 8.3A – Corrosive to eyes 9.1D (chronic) – Slightly harmful in the aquatic environment
<b>GHS Classification:</b>	Acute toxicity: oral – Category 4 Acute toxicity: dermal – Category 5 Corrosive to metals – Category 1 Skin corrosion/irritation – Category 1B Serious eye damage/eye irritation - Category 1 Aquatic toxicity: chronic – Category 4
<b>Hazard Statements:</b>	H290 – May be corrosive to metals



H302 – Harmful if swallowed  
H313 – May be harmful in contact with skin  
H314 – Causes severe skin burns and eye damage  
H318 – Causes serious eye damage  
H413 – May cause long lasting harmful effects to aquatic life

**GHS Pictograms:****Signal Word:**

DANGER

**Prevention Statements:**

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**



Sodium hydroxide

1310-73-2

30-60%

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.

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**SECTION 4: FIRST AID MEASURES**

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<b>Workplace Facilities Required:</b>	Eye wash and safety shower facilities should be provided.
<b>If Inhaled:</b>	Remove to fresh air. Lie patient down and keep warm and at rest. Apply artificial respiration if not breathing. Seek immediate medical attention.
<b>In Contact with Eye:</b>	Hold eyes open, flush with water for at least 15 minutes. Seek immediate medical attention.
<b>In Contact with Skin:</b>	Wash skin with plenty of water, while removing contaminated clothing and shoes. Wash contaminated clothing before re-use. Seek immediate medical attention.
<b>If Swallowed:</b>	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.
<b>Advice to Doctor:</b>	Treat symptomatically. Substance is alkaline and may continue to cause damage several hours after exposure.

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**SECTION 5: FIRE FIGHTING MEASURES**

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<b>Fire/Explosion Hazard:</b>	Product is not flammable or combustible.
<b>Suitable Extinguishing Media:</b>	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.
<b>Precautions in Connection with Fire:</b>	May give off toxic and corrosive fumes in a fire.
<b>Advice for firefighters:</b>	Wear full firefighting gear and self-contained breathing apparatus. Prevent spills from entering drains and water courses.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

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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.

<b>Precautions:</b>	Clear area of all unprotected personnel. Keep unnecessary and unprotected personnel from entering area. Avoid generating mist/spray.
<b>Suitable Protective Equipment:</b>	Emergency responders must use personal protective equipment, including gloves, protective overalls and footwear, safety goggles or face shield. Respiratory protection may be required if there is a risk of exposure to mist/spray. Avoid release to the environment. If spill does enter waterways inform the relevant authority (e.g. Local Council Pollution hotline).
<b>Spill or Leak Procedures:</b>	Stop leak if safe to do so. Contain the spill. Spills may be neutralised with a suitable dilute acid. Use inert material such as sand, earth or vermiculite to absorb spill. Collect



spilled material and place in a suitable, clean, chemical waste container. 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. 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:** No Workplace Exposure Standards have been established for this product.

For sodium hydroxide: Ceiling 2 mg/m<sup>3</sup>

**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.

**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:** Colourless, slightly hazy

**Odour:** Not available **Odour Threshold:** Not available



<b>pH (25°C):</b>	>14	<b>Solubility (water, 25°C):</b>	Miscible
<b>Melting/Freezing point:</b>	Not available	<b>Boiling Point:</b>	> 100°C
<b>Flammability:</b>	Non-flammable	<b>Flash Point:</b>	Not applicable
<b>UEL/LEL:</b>	Not applicable	<b>Vapour Pressure (20°C):</b>	Not available
<b>Decomposition Temp:</b>	Not available	<b>Autoignition Temp:</b>	Not available
<b>Relative Density:</b>	1.51 – 1.53	<b>Vapour Density:</b>	Not available
<b>Partition Coefficient:</b>	Not available	<b>Viscosity:</b>	Not available
<b>n-octanol/water</b>			

## SECTION 10: STABILITY AND REACTIVITY

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<b>Stability:</b>	Stable under normal cool, dry storage conditions.
<b>Reactivity:</b>	Reacts exothermically with acids. May produce toxic gases on contact with acids.
<b>Conditions to Avoid:</b>	Excessive heat.
<b>Incompatibility:</b>	Incompatible with strong acids, acid chlorides, acid anhydrides, chloroformates and strong oxidisers. Avoid contact with copper, aluminium and their alloys.
<b>Hazardous Decomposition:</b>	Decomposition may result in formation of corrosive fumes.

## SECTION 11: TOXICOLOGICAL INFORMATION

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### Acute Exposure

<b>Acute Toxicity:</b>	LD50 oral > 300 - ≤ 2000 mg/kg. LD50 dermal > 2000 - ≤ 5000 mg/kg. LC50 inhalation > 5 mg/L (dust or mist)
<b>Inhalation:</b>	Not an expected route of exposure under normal operating conditions. Inhalation of large volumes of mist/spray may cause irritation/corrosion to mucous membranes.
<b>Ingestion:</b>	Harmful if swallowed. Ingestion may cause chemical burns to mouth and gastrointestinal tract and may cause nausea, diarrhoea and vomiting.
<b>Skin Contact:</b>	Corrosive to skin. May cause skin burns.
<b>Eye Contact:</b>	Corrosive to eyes. May cause corneal damage and permanent injury.
<b>Sensitiser:</b>	Not expected to be a respiratory or contact sensitiser.

### Chronic Exposure

<b>Mutagen, Carcinogen, or Reproductive Toxicant:</b>	No known effects.
<b>Specific Target Organ Systemic Toxicity:</b>	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**

<b>Ecotoxicity:</b>	LC/EC <sub>50</sub> > 1 but ≤ 100 mg/kg Product is not classified as ecotoxic.
<b>Persistence/degradability:</b>	Rapidly degradable.
<b>Bio-accumulation:</b>	Not bio-accumulative.
<b>Mobility:</b>	Product is miscible in water. Ecotoxicity data is based on hazardous ingredient information.

**SECTION 13: DISPOSAL CONSIDERATIONS**

<b>Disposal:</b>	Do not allow product to enter drains or waterways. Recycle and reuse wherever possible. Waste product may be treated with dilute acid prior to disposal so it is no longer hazardous. Treat and neutralise at an approved treatment plant. Dispose of waste product via an approved waste disposal contractor.
<b>Disposal of Packaging:</b>	Packaging may contain product residues and should be treated as hazardous. Where possible return to supplier for reuse/recycling. Dispose of packaging via an approved waste disposal contractor.

**SECTION 14: TRANSPORT INFORMATION**

V-GUARD 230 is classified as a Dangerous Good for transport in accordance with NZS5433:2012, IMDG or IATA.

**Hazchem Code: 2R****NZS5433:2012**

UN No: 1824  
Proper Shipping Name: Sodium hydroxide solution  
Class: 8  
Packing Group: II  
Environmental hazard: No  
Limited Quantity: 1L

**IMDG:**

UN No: 1824  
Proper Shipping Name: Sodium hydroxide solution  
Class: 8  
Packing Group: II  
Marine Pollutant: No  
EmS: F-A, S-B  
Limited Quantity: 1L

**IATA:**

UN No: 1824  
Proper Shipping Name: Sodium hydroxide solution  
Class: 8



Packing Group: II  
Environmental hazard: No  
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

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**Group Standard Allocation:** Water Treatment Chemicals (Corrosive) Group Standard 2017  
**HSNO Approval Code:** HSR002681  
**HSNO Classifications:** 6.1D oral Acutely toxic  
6.1E dermal – Acutely toxic  
8.1A – Corrosive to metals  
8.2B – Skin corrosive  
8.3A – Eye corrosive  
9.1D (chronic) – Slightly harmful in the aquatic environment  
**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

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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: 13/03/2019

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**