

# SAFETY DATA SHEET

## Hazardous Chemical, Dangerous Goods

### 1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

<b>Product name:</b>	<b>FRONTLINE</b>
<b>Recommended</b>	Cleaner / Sanitiser
<b>Supplier:</b>	Hygiene Technologies Ltd
<b>Street Address:</b>	28 Rangitane Rd Whakatu, Hastings 4172 New Zealand
<b>Telephone:</b>	+ 64 6 876 4111 or 0800 732 525
<b>Emergency Telephone number:</b>	National Poisons Centre (24/7) - <b>0800 POISON</b> (0800 764 766)

### 2. HAZARDS IDENTIFICATION

This material is hazardous according to criteria of EPA New Zealand.



#### Signal Word

DANGER

#### Hazard Classifications

Corrosive to Metals - Category 1  
Acute Oral Toxicity - Category 4  
Skin Corrosion - Category 1B  
Eye Damage - Category 1  
Aquatic Toxicity (acute) – Category 1

#### Hazard Statements

**H290** May be corrosive to metals.  
**H302** Harmful if swallowed.  
**H314** Causes severe skin burns and eye damage.  
**H400** Very toxic to aquatic life.

#### Prevention Statements

**P234** Keep only in original container.  
**P264** Wash hands, face and all exposed skin thoroughly after handling.  
**P270** Do not eat, drink or smoke when using this product.  
**P260** Do not breathe mist, vapours, or spray.  
**P280** Wear protective gloves and protective clothing including eye and face protection.  
**P273** Avoid release to the environment.

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## Response Precautionary Statements

<b>P301+P312</b>	IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.
<b>P330</b>	Rinse mouth with water.
<b>P303+361+P353</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
<b>P363</b>	Wash contaminated clothing before reuse.
<b>P304+P340</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
<b>P310</b>	Immediately call a POISON CENTRE or doctor.
<b>P321</b>	Specific treatment (see first aid section on the label).
<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P390</b>	Absorb spillage to prevent material damage.
<b>P391</b>	Collect spillage.

## Storage Precautionary Statement

<b>P405</b>	Store locked up.
<b>P406</b>	Store in corrosive-resistant insert appropriate compatible material container with a resistant inner liner.

## Disposal Precautionary Statement

<b>P501</b>	Dispose of contents/container in accordance with local, regional, national and international regulations.
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## 3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS No.	PROPORTION
Sodium metasilicate	10213-79-3	<10 % (w/w)
Sodium hydroxide	1310-73-2	<10 % (w/w)
Quaternary Ammonium Compound	8001-54-5	<10 % (w/w)
2-Butoxyethanol	111-76-2	<10 % (w/w)
Ingredients determined to be Non-Hazardous		Balanced

## 4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone New Zealand 0800 764 766).

<b>Swallowed</b>	Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious person. If vomiting occurs give further water. Immediately call Poisons Centre or doctor.
<b>Eye Contact</b>	Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.
<b>Skin Contact</b>	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance. For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if

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material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

**Inhaled** Remove person from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

**PPE for First Aiders** Wear rubber boots, overalls, gloves, apron, chemical goggles and face shield. Use with adequate ventilation. If inhalation risk exists, wear air-supplied mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

## 5. FIRE FIGHTING MEASURES

<b>Specific Hazard</b>	Non-combustible material
<b>Suitable Extinguishing Media</b>	If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).
<b>Fire Fighting further Advice</b>	Not combustible, however following evaporation of aqueous component residual material can burn if ignited.
<b>HAZCHEM</b>	2X

## 6. ACCIDENTAL RELEASE MEASURES

### SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust (from dried product). Wipe up with non-combustible absorbent (e.g., clean cloth or paper towel). Collect and seal in properly labeled containers or drums for disposal.

### LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

**Dangerous Goods - Initial Emergency Response Guide No: 37**

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Avoid eye contact and skin contact. Avoid inhalation of dusts. Wear suitable protective equipment.

**Conditions for Safe Storage:** Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition.  
 Store locked up. Do not expose to temperatures exceeding manufacturer's/supplier's recommendations. Store in original container. Keep container standing upright. Keep containers closed when not in use - check regularly for leaks.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**National occupational exposure limits:**  
 As published by WorkSafe New Zealand.

	TWA		STEL		NOTICES
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Sodium Hydroxide	-	2	-	-	

WES-TWA (Workplace Exposure Standard - Time-weighted average). The average airborne concentration of a substance calculated over an eight-hour working day.

WES-Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded at any time during any part of the working day.

WES-STEL (Workplace Exposure Standard - Short-term exposure limit). The 15-minute time weighted 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. Exposures at concentrations between the WES-TWA and the WES-STEL should be less than 15 minutes, should occur no more than four times per day, and there should be at least 60 minutes between successive exposures in this range.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

**Biological Limit Values:** As per the WorkSafe New Zealand the ingredients in this material do not have a Biological Limit Allocated.

**Engineering Measures:** Ensure ventilation is adequate to maintain air concentrations

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below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator. Vapour heavier than air - prevent concentration in hollows or sumps. Do NOT enter confined spaces where vapour may have collected.

## Personal Protective Equipment:

RUBBER BOOTS, OVERALLS, GLOVES, APRON, CHEMICAL GOGGLES, FACE SHIELD.

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Wear rubber boots, overalls, gloves, apron, chemical goggles and a face shield. A face shield may be used for supplementary protection of the face, never for primary protection of the eyes. Use with adequate ventilation. If inhalation risk exists, wear air-supplied mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

## Hygiene Measures:

Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Blue-Green
<b>Form</b>	Liquid
<b>Odour</b>	Slight
<b>pH</b>	13.3 - 13.9
<b>Freezing Point</b>	Not Available
<b>Boiling Point / Range (°C)</b>	100 °C
<b>Flash Point (°C)</b>	Not Applicable
<b>Flammability</b>	Not Applicable
<b>Explosive Limits</b>	Not Applicable
<b>Vapour Pressure</b>	Not Available
<b>Vapour Density</b>	Not Available
<b>Specific Gravity</b>	1.034 - 1.039
<b>Solubility</b>	Soluble in Water
<b>Partition Coefficient</b>	Not Available
<b>Auto-Ignition Temperature</b>	Not Applicable

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Decomposition Temperature	Not Available
Kinematic Viscosity	Not Available
SADT	Not Available

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	This material is stable under proper handling and storage conditions.
<b>Conditions to Avoid:</b>	Elevated temperatures and sources of ignition.
<b>Incompatible Materials:</b>	Strong acids and metals
<b>Hazardous Decomposition Products:</b>	Oxides of carbon and nitrogen, smoke and other toxic fumes.
<b>Reactivity</b>	Reacts with strong acids and corrodes metals.

## 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label.

No data available on final product. Information based on ingredients

Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

### ACUTE EFFECTS

<b>Ingestion</b>	Harmful if swallowed. Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.
<b>Inhalation</b>	Material may be an irritant to mucous membranes and respiratory tract.
<b>Skin Contact</b>	Contact with skin will result in severe irritation. Corrosive to skin -may cause skin burns.
<b>Eye Contact</b>	A severe eye irritant. Corrosive to eyes: contact can cause corneal burns. Contamination of eyes can result in permanent injury.

### ACUTE TOXICITY

<b>Inhalation</b>	This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): LC50 > 20.0 mg/L for vapours or LC50 > 5.0 mg/L for dust and mist or LC50 > 5,000 ppm gas.
<b>Skin Contact</b>	This material has been classified as Skin Corrosion - Category 1B. Acute toxicity estimate (based on ingredients): >5,000 mg/Kg bw

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<b>Ingestion</b>	This material has been classified as Acute Oral Toxicity – Category 4. Harmful if swallowed. Acute toxicity estimate (based on ingredients): 2,000 – 5,000 mg/Kg bw
<b>Corrosion / Irritancy</b>	Eye: this material has been classified as Eye Damage - Category 1. Skin: this material has been classified as Skin Corrosion - Category 1B. Causes severe skin burns and eye damage.
<b>Sensitisation</b>	Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.
<b>Aspiration Hazard</b>	This material has been classified as non-hazardous.
<b>Specific Target Organ Toxicity (Single Exposure)</b>	This material has been classified as non-hazardous.
<b>Specific Target Organ Toxicity (Repeat Exposure)</b>	This material has been classified as non-hazardous.

## CHRONIC TOXICITY

<b>Mutagenicity</b>	This material has been classified as non-hazardous.
<b>Carcinogenicity</b>	This material has been classified as non-hazardous.
<b>Reproductive Toxicity (including via</b>	This material has been classified as non-hazardous.

## 12. ECOTOXICOLOGICAL INFORMATION

No data available on final product. Information based on ingredients

Avoid contaminating waterways.

<b>Acute aquatic hazard</b>	This material has been classified as hazardous to the Aquatic Environment Acute - Category 1 – very toxic to aquatic life.
<b>Long-Term Aquatic Hazard</b>	This material has been classified as non-hazardous.
<b>Ecotoxicity in the Soil Environment</b>	This material has been classified as non-hazardous.
<b>Ecotoxicity to terrestrial vertebrates</b>	This material has been classified as Hazardous to Terrestrial Vertebrates.

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<b>Ecotoxicity to terrestrial invertebrates</b>	This material has been classified as non-hazardous.
<b>Ecotoxicity</b>	No information available.
<b>Persistence and Degradability</b>	No information available.
<b>Bioaccumulative Potential</b>	No information available.
<b>Mobility</b>	No information available.

## 13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible, material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

## 14. TRANSPORT INFORMATION

### ROAD AND RAIL TRANSPORT

Classified as a Dangerous Good according to NZS 5433:2020 Transport of Dangerous Goods on Land.



<b>UN Number:</b>	1760
<b>Dangerous Goods Class:</b>	8
<b>Packing Group:</b>	III
<b>Hazchem Code:</b>	2X
<b>Emergency Response Guide No:</b>	37
<b>Proper Shipping Name:</b>	CORROSIVE LIQUID, N.O.S. (SODIUM HYDROXIDE, SODIUM METASILICATE)

**Segregation Dangerous Goods:** Not to be loaded with explosives (Class 1), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7) or food and food packaging in any quantity. Note 1: Concentrated strong alkalis are incompatible with concentrated strong acids. Note 2: Concentrated strong acids are incompatible with concentrated strong alkalis. Note 3: Acids are incompatible with Dangerous Goods of Class 6 which are cyanides. Exemptions may apply.



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## MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.



**UN Number:** 1760  
**Dangerous Goods Class:** 8  
**Packing Group:** III  
**Proper Shipping Name:** CORROSIVE LIQUID, N.O.S.  
(SODIUM HYDROXIDE, SODIUM METASILICATE)

## AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.



**UN Number:** 1760  
**Dangerous Goods Class:** 8  
**Packing Group:** III  
**Proper Shipping Name:** CORROSIVE LIQUID, N.O.S.  
(SODIUM HYDROXIDE, SODIUM METASILICATE)

## 15. REGULATORY INFORMATION

**EPA Group Standard:** HSR002526 - Cleaning Products (Corrosive) Group Standard

All components of this product are listed on or exempt from the New Zealand Inventory of Chemical (NZIoC).

## 16. OTHER INFORMATION

**Date issued:** June 11, 2024  
**Version:** 3.0  
**Replaces:** June 18, 2019  
**Date of Next Review:** June 11, 2029

# SAFETY DATA SHEET



Safety Data Sheets are updated frequently. Please ensure that you have a current copy. This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate.

However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.

**End of Safety Data Sheet**