Geller Amaze Premium
Safety Data Sheet

1. Identification of Substance & Company

Product

Product name	Geller Amaze Premium
Product code	NA
HSNO approval	HSR002526
Approval description	Cleaning Products (Corrosive) Group Standard 2020
UN number	1760
Proper Shipping Name	CAUSTIC ALKALI LIQUID, N.O.S. (contains potassium hydroxide)
DG class	NA
Packaging group	II
Hazchem code	2R
Uses	Detergent/Sanitiser for Automatic Dishwashers. Use according to manufacturer's directions.

Company Details

Company	Integra Industries Ltd
Address	21A Grosvenor St , South Dunedin
Telephone	0800 667 843
Website	www.integraindustries.co.nz

Emergency Telephone Number: 0800 764 766

2. Hazard Identification

Approval

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Classified as Dangerous Goods for transport purposes.

Hazard Categories	Hazard Statement/s
Corrosive to Metals Category 1	H290 - May be corrosive to metals.
Acute Toxicity (Oral) Category 4	H302 - Harmful if swallowed.
Skin Corrosion/Irritation Category 1B	H314 - Causes severe skin burns and eye damage.
Serious Eye Damage/Eye Irritation Category 1	

SYMBOLS

DANGER

Other Classifications

Legend
1. Classification drawn from CCID EPA NZ;
2. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Determined using GHS/HSNO criteria: 8.1A, 6.1D (oral), 8.2B, 8.3A

Precautionary Statements

Prevention	P260 Do not breathe mist/vapours/spray. P264 Wash all exposed external body areas thoroughly after handling. P280 Wear protective gloves, protective clothing, eye protection and face protection. P234 Keep only in original packaging.
Response	P301 + P330 + P331 + P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If more than 15 mins from Doctor, INDUCE VOMITING (if conscious). P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower].
P305 + P351 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 IF INHALED: Immediately call a poison centre or doctor.

Storage P405 Store locked up.

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

3. Composition / Information on Ingredients

See section below for composition of Mixtures

Component	CAS/ Identification	%[weight]
Potassium Hydroxide	1310-58-3	10-30

4. First Aid

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

Exposure

Ingestion

IF SWALLOWED:
- 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.

Eye Contact

IF IN EYES:
- 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.

Skin Contact

IF ON SKIN:
- 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.

Inhalation

IF INHALED:
- 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.
- Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema.
- Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs).
- As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi- recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested.
- Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered.

This must definitely be left to a doctor or person authorised by him/her.
(ICSC13719)

Indication of any immediate medical attention and special treatment needed

For acute or short-term repeated exposures to highly alkaline materials:
- Respiratory stress is uncommon but present occasionally because of soft tissue edema.
- Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary.
- Oxygen is given as indicated.
- The presence of shock suggests perforation and mandates an intravenous line and fluid administration.
- Damage due to alkaline corrosives occurs by liquefaction necrosis whereby the saponification of fats and solubilisation of proteins allow deep penetration into the tissue.

Alkalis continue to cause damage after exposure.
INGESTION:
- Milk and water are the preferred diluents

No more than 2 glasses of water should be given to an adult.
- Neutralising agents should never be given since exothermic heat reaction may compound injury.

*Catharsis and emesis are absolutely contra-indicated.
*Activated charcoal does not absorb alkali.
*Gastric lavage should not be used.
Supportive care involves the following:
- Withhold oral feedings initially.
- If endoscopy confirms transmucosal injury start steroids only within the first 48 hours.
- Carefully evaluate the amount of tissue necrosis before assessing the need for surgical intervention.
- Patients should be instructed to seek medical attention whenever they develop difficulty in swallowing (dysphagia).

SKIN AND EYE:
- Injury should be irrigated for 20-30 minutes.

Eye injuries require saline. [Ellenhorn & Barceloux: Medical Toxicology]

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Suitable Extinguishing Media:
- Water spray or fog.
- Foam.
- Dry chemical powder.
- BCF (where regulations permit).

Special hazards arising from the substrate or mixture:

Fire incompatibility: None known.

For 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 a significant fire risk, however containers may burn.

May emit corrosive fumes.

6. Accidental Release Measures

Containment and Clean-up method

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 precautions, protective equipment and emergency procedures

See section 8

Environmental Precautions

See section 12

7. Storage and Handling

Storage

SUITABLE CONTAINER:
- 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.

Handling

- 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.
- DO NOT store near acids, or oxidising agents
- No smoking, naked lights, heat or ignition sources..

Storage Incompatibility

- Reacts vigorously with acids
- Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.
- Avoid contact with copper, aluminium and their alloys.

8. Exposure Controls / Personal Protective Equipment

Control Parameters

Occupational Exposure Limits (OEL)

Ingredient Data

Source	Ingredient	Material Name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	Potassium hydroxide	Potassium hydroxide	Not Available	Not Available	2 mg/m3	Not Available

Ingredient	Original IDLH	Revised IDLH
Potassium hydroxide	Not available	Not available

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 measure, 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

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.

9. Physical & Chemical Properties

Appearance	Opaque alkaline liquid with potassium hydroxide odour; miscible with water.
Physical state	Liquid
Odour	Not available
Odour threshold	Not available
pH (as supplied)	11.4-12
Relative density (Water=1)	1.16
Flammability	No information available
Boiling/freezing point	Not Applicable
Solubility	Miscible
Flash point	Not applicable
Vapour pressure	Not Available
Evaporation rate	Not Available

10. Stability & Reactivity

Chemical Stability	– Unstable in the presence of incompatible materials. – Product is considered stable. – Hazardous polymerisation will not occur.
Conditions to be avoided	See section 7
Reactivity	See section 7
Incompatible materials	See section 7
Hazardous decomposition	See section 5
Hazardous Polymerization	Hazardous polymerisation will not occur.

11. Toxicological Information

Summary

POTTASSIUM HYDROXIDE
Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a 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.
The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.

TOXICITY	IRRITATION
Oral (Rat) LD50: 273 mg/kg[2]	Eye (Rodent - rabbit): 1mg/24H - Moderate
	Eye: adverse effect observed (irritating)[1]
	Skin (Human): 50mg/24H - Severe
	Skin (Rodent - guinea pig): 50mg/24H - Severe
	Skin (Rodent - rabbit): 50mg/24H - Severe
	Skin: adverse effect observed (corrosive)[1]

Supporting Data

Acute	**Oral**	Using LD50's for ingredients, the Acute Toxicity Estimate (ATE) (oral) for the mixture is Oral (Rat) LD50: 273 mg/kg[2].
	Ingestion	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion. Ingestion of alkaline corrosives may produce burns around the mouth, ulcerations and swellings of the mucous membranes, profuse saliva production, with an inability to speak or swallow. Both the oesophagus and stomach may experience burning pain; vomiting and diarrhoea may follow.
	Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhaling corrosive bases may irritate the respiratory tract. Symptoms include cough, choking, pain and damage to the mucous membrane.
	Eye	The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating. If applied to the eyes, this material causes severe eye damage. Direct eye contact with corrosive bases can cause pain and burns. There may be swelling, epithelium destruction, clouding of the cornea and inflammation of the iris. Mild cases often resolve; severe cases can be prolonged with complications such as persistent swelling, scarring, permanent cloudiness, bulging of the eye, cataracts, eyelids glued to the eyeball and blindness.
	Skin	The material can produce chemical burns following direct contact with the skin. Skin contact with alkaline corrosives may produce severe pain and burns; brownish stains may develop. The corroded area may be soft, gelatinous and necrotic; tissue destruction may be deep. 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.
Chronic	**Sensitisation**	Based on available data, the classification criteria are not met.
	Mutagenicity	Based on available data, the classification criteria are not met.
	Carcinogenicity	Based on available data, the classification criteria are not met.
	Reproductive / Developmental	Based on available data, the classification criteria are not met.
	STOT – Single Exposure	Based on available data, the classification criteria are not met.
	STOT – Repeated Exposure	Based on available data, the classification criteria are not met.
	Aspiration Hazard	Based on available data, the classification criteria are not met.

12. Ecological Data

Summary

May cause long-term adverse effects in the aquatic environment.
Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark.
Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.
Wastes resulting from use of the product must be disposed of on site or at approved waste sites. Prevent, by any means available, spillage from entering drains or water courses.
DO NOT discharge into sewer or waterways.

BRIEFLY SUMMARISE ECOTOXICITY. In all cases prevent run-off to drains, sewers and waterways.

Supporting Data

Toxicity

CLEANER DISHWASHER AMAZE PREMIUM POWDER GELLER 5 LITRE

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

POTASSIUM HYDROXIDE

Endpoint	Test Duration (hr)	Species	Value	Source
NOEC(ECx)	24h	Fish	28mg/l	2
LC50	96h	Fish	80mg/l	2

Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Bioaccumulation No data available for all ingredients
Mobility No data available for all ingredients
Persistence and Degradability No data available for all ingredients
Persistence: Air No data available for all ingredients

13. Disposal Considerations

Disposal method

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.
- DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority.
- 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 suitable dilute acid 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

Disposal Requirements

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.

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

14. Transport Information

Classified Dangerous Goods by the by the NZ Transport Agency - Land Transport Rule (2005).

There are no specific restrictions for this product (not a dangerous good).

UN number:	1719	**Proper shipping name:**	CAUSTIC ALKALI LIQUID, N.O.S. (contains potassium hydroxide)
Class(es)	8	**Packing group:**	II
Precautions:	Provision: 274 Limited Qty: 1 L	**Hazchem code:**	2R

IMDG

UN number:	1719	**Proper shipping name:**	CAUSTIC ALKALI LIQUID, N.O.S. (contains potassium hydroxide)
Class(es)	8	**Packing group:**	II
Precautions:	Provision: 274 Limited Qty: 1 L	**EmS:**	F-A, S-B

IATA

UN number:	1719	**Proper shipping name:**	CAUSTIC ALKALI LIQUID, N.O.S. (contains potassium hydroxide)
Class(es)	8	**Packing group:**	II
Precautions:	NA	**ERG Code**	8L

15. Regulatory Information

Safety, health and environmental regulations / legislation specific for the substance or mixture
This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	**Group Standard**
HSR002526	Cleaning Products Corrosive Group Standard 2020

Please refer to Section 8 of the SDS for any applicable tolerable exposure limit or Section 12 for environmental exposure limit.

potassium hydroxide is found on the following regulatory lists
New Zealand Approved Hazardous Substances with controls
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantity (Compliance Certificate)	Quantity (Compliance Certificate - Farms >4 ha)
8.2B	250 kg or 250 L	3500 kg or 3500 L

Maximum quantities of certain hazardous substances permitted on passenger service vehicles

Subject to Regulation 13.14 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

16. Other Information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA	Permissible Concentration-Time Weighted Average
PC-STEL	Permissible Concentration-Short Term Exposure Limit
IARC	International Agency for Research on Cancer
ACGIH	American Conference of Governmental Industrial Hygienists
STEL	Short Term Exposure Limit
TEEL	Temporary Emergency Exposure Limit
IDLH	Immediately Dangerous to Life or Health Concentrations
ES	Exposure Standard
OSF	Odour Safety Factor
NOAEL	No Observed Adverse Effect Level
LOAEL	Lowest Observed Adverse Effect Level
TLV	Threshold Limit Value
LOD	Limit Of Detection
OTV	Odour Threshold Value
BCF	BioConcentration Factors
BEI	Biological Exposure Index
DNEL	Derived No-Effect Level
PNEC	Predicted no-effect concentration
MARPOL	International Convention for the Prevention of Pollution from Ships
IMSBC	International Maritime Solid Bulk Cargoes Code
IGC	International Gas Carrier Code
IBC	International Bulk Chemical Code
AIIC	Australian Inventory of Industrial Chemicals
DSL	Domestic Substances List
NDSL	Non-Domestic Substances List
IECSC	Inventory of Existing Chemical Substance in China
EINECS	European INventory of Existing Commercial chemical Substances
ELINCS	European List of Notified Chemical Substances
NLP	No-Longer Polymers
ENCS	Existing and New Chemical Substances Inventory
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances
TSCA	Toxic Substances Control Act
TCSI	Taiwan Chemical Substance Inventory
INSQ	Inventario Nacional de Sustancias Químicas
NCI	National Chemical Inventory
FBEPH	Russian Register of Potentially Hazardous Chemical and Biological Substances

Review

Date	Reason for review
1 April 2025	Phone number update

Disclaimer

This SDS was prepared by Integra Industries Ltd and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely GHS 7 classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Integra Industries Ltd and must not be copied, edited or used for other than intended purpose.