SECTION 1: Identification of the substance / mixture and of the company / undertaking

Date issued	01.01.2025

1.1. Product identifier

Product name	Hyline HLU 32

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product group	Alkaline dishwashing liquid for dishwashers.
Uses advised against	No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Distributor

Company name	Hobart Food Equipment
Postal address	Unit 1 / 2 Picken Street
Postcode	NSW 2128
City	Silverwater
Country	Australia
Telephone number	02 9714 0200
Website	http://www.hobartfood.com.au

1.4. Emergency telephone number

Emergency telephone	Description: National Poison Information Centre: 13 11 26

SECTION 2: Hazards identification

2.1. Classification of substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Eye Dam. 1; H318 Skin Corr. 1A; H314

CLP classification, comments	Classified as Hazardous according to the Globally System ag Classification and labelling ag Chemicals (GHS) including Wok, Health and Safety Regulations Australia. Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)
Substance / mixture hazardous properties	For further information, please refer to section 11.
Additional information on classification	The informations stated in this MSDS, applies for the concentrated product. See Sec. 16, for informations regarding recommended user solutions

2.2. Label elements

Hazard pictograms (CLP)

Composition on the label	Sodium hydroxide , Caustic potash
Signal word	Danger
Hazard statements	H314 Causes severe skin burns and eye damage.
Precautionary statements	P280 Wear protective gloves / protective clothing / eye protection / face protection. P303+P361+P353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower. 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.

2.3. Other hazards

Health effect	Corrosive to skin and eyes. May cause permanent damage to the eyes, especially if the product is not washed away IMMEDIATELY. See section 11 for additional information on health hazards.
Environmental effects	Substantial amounts of the product may lead to a local change in acidity in small water systems which may have adverse effects on aquatic organisms. This product does not contain any PBT or vPvB substances.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
Sodium hydroxide	CAS No.: 1310-73-2 EC No.: 215-185-5 REACH Reg. No.: 01-2119457892-27-xxxx	Skin Corr. 1A; H314 Eye Dam. 1; H318 Met. Corr. 1; H290	30 - 60 %
Potassium Hydroxide	CAS No.: 1310-58-3 EC No.: 215-181-3 Index No.: 019-002-00-8 REACH Reg. No.: 01-2119487136-33-xxxx	Met. Corr. 1; H290 Acute tox. 4;H302 Skin Corr 1A;H314	1 - 5 %

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Remove affected person from source of contamination.
Inhalation	Move injured person into fresh air and keep person calm under observation. If uncomfortable: Seek hospital and bring these instructions.
Skin contact	Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if any discomfort continues.
Eye contact	Important! Immediately rinse with water for at least 15 minutes. May cause permanent damage if eye is not immediately irrigated. Make sure to remove any contact lenses from the eyes before rinsing. Immediately transport to hospital or eye specialist. Continue flushing during transport to hospital.
Ingestion	Immediately rinse mouth and drink plenty of water. Call an ambulance. Bring along these instructions. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Do not give victim anything to drink if he is unconscious.
Recommended personal protective equipment for first aid responders	Wear necessary protective equipment. For personal protection, see section 8.

4.2. Most important symptoms and effects, both acute and delayed

Acute symptoms and effects	Strongly corrosive. May cause deep tissue damage. Strongly corrosive. Causes severe burns and serious eye damage. Immediate first aid is imperative.
Delayed symptoms and effects	The etching penetrates deeply into the tissue and is first noticed after a while.

4.3. Indication of any immediate medical attention and special treatment needed

Other information	In case of unconsciousness, ingestion or eye contact: Immediately call a doctor / ambulance. Show this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Carbon dioxide, foam or water spray.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	This product is not flammable. During fire, gases hazardous to health may be formed. Water used for fire extinguishing, which has been in contact with the product, may be corrosive.

5.3. Advice for firefighters

Personal protective equipment	Wear necessary protective equipment. For personal protection, see section 8.
Fire fighting procedures	Reference is made to the company fire procedure. If risk of water pollution occurs, notify appropriate authorities. Avoid breathing fire vapours.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Look out! The product is corrosive. Use protective gloves, goggles and suitable protective clothing. In case of inadequate ventilation use suitable respirator. For personal protection, see section 8.

6.2. Environmental precautions

Environmental precautionary measures	Avoid discharge into water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment.

6.3. Methods and material for containment and cleaning up

Cleaning method	Dam and absorb spillage with sand, sawdust or other absorbent. Wash contaminated area with water.

6.4. Reference to other sections

Other instructions	See section 8 and section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Avoid spilling, skin and eye contact. Use work methods which minimize spreading of vapours, dust, smoke, aerosols, splashes etc. to the extent technically possible. Do not mix with acidic products.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Corrosive liquid. Store in a cool dry well-ventilated area. Store in original packages as approved by manufacture. Store away from oxidising agents and acid. Protect from freezing. Keep container closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Provide a catch-tank in a bunded area. Ensure that storage conditions comply with applicable local and national regulations. Fo information on the design of the storerum, reference should be made to Australian Standard AS 3780. The Storrage and handling of corrosive substances.
Conditions to avoid	Keep away from acids. Keep away from ammonium salts. Keep away from aluminium, tin, zinc, and galvanised iron. Prevent long contact with glass surfaces

7.3. Specific end use(s)

Specific use(s)	The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Value	TWA Year
Sodium hydroxide	CAS No.: 1310-73-2	**OEL short term value** Value: 2 mg/m3	TWA Year: 2011
Potassium Hydroxide	CAS No.: 1310-58-3	TWA (8h) : 2 mg/m3; L	TWA Year: 2007

DNEL / PNEC

Substance	Sodium hydroxide
DNEL	**Group:** Professional **Route of exposure:** Long term (repeated) - Inhalation - Local effect **Value:** 1 mg/m3 **Group:** Consumer **Route of exposure:** Short term (acute) - Dermal - Local effect **Value:** 2% **Group:** Consumer **Route of exposure:** Long term (repeated) - Inhalation - Local effect **Value:** 1 mg/m3 **Group:** Professional **Route of exposure:** Short term (acute) - Dermal - Local effect **Value:** 2%
Substance	Potassium Hydroxide
DNEL	**Group:** Worker **Route of exposure:** Long term (repeated) - Inhalation - Local effect **Value:** 1 mg/m3 **Group:** Consumer **Route of exposure:** Long term (repeated) - Inhalation - Local effect **Value:** 1 mg/m3

8.2. Exposure controls

Safety signs

Precautionary measures to prevent exposure

Appropriate engineering controls	This substance is hazardous and should be uses with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations og vapour/mist below the exposure standards, suitable respiratory protection must be worn.

Eye / face protection

Suitable eye protection	Wear tight-fitting goggles or face shield.
Eye protection, comments	Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand protection

Suitable gloves type	Wear gloves of impervious materials such as rubber or plastic. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.
Breakthrough time	Value:

Skin protection

Additional skin protection measures	Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Respiratory protection

Respiratory protection necessary at	If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in arder to make any necessary changes for individual circumstances.

Thermal hazards

Thermal hazards	See section 5.

Appropriate environmental exposure control

Environmental exposure controls	See section 6.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Fluid.
Colour	Colourless to pale yellow.

Odour	No data recorded.
Odour limit	Comments: No data recorded.
pH	Status: In delivery state Value: > 13,0 Status: In aqueous solution Value: ~ 12,5 Concentration: 1 % Status: In aqueous solution Value: ~ 12,5 Concentration: 0,5 %
Melting point / melting range	Comments: Not relevant.
Boiling point / boiling range	Comments: Not relevant.
Flash point	Comments: Not relevant.
Evaporation rate	Comments: Not relevant.
Flammability (solid, gas)	Not relevant.
Explosion limit	Comments: Not relevant.
Vapour pressure	Comments: Not relevant.
Vapour density	Comments: Not relevant.
Bulk density	Value: ~ 1,40 kg/l
Solubility	Medium: Water Comments: Completely soluble in water.
Partition coefficient: n-octanol/ water	Comments: Not relevant.
Spontaneous combustability	Comments: Not relevant.
Decomposition temperature	Comments: Not relevant.
Viscosity	Value: < 100 mPas
Explosive properties	Not explosive.
Oxidising properties	Does not meet the criteria for oxidising.

9.2. Other information

Other physical and chemical properties

Comments	No data recorded.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Reacts violently with strong acids. Reacts strongly with water. Do not add water directly to the product. It may cause a violent reaction. Risk of bumping (splashes).

10.4. Conditions to avoid

Conditions to avoid	Heating. Extremes of temperatures. Avoid contact with acids.

10.5. Incompatible materials

Materials to avoid	Strong acids. Acids, oxidising. Alkali-sensitive metals such as aluminium, tin, lead and zinc and alloys with these metals.

10.6. Hazardous decomposition products

Hazardous decomposition products	In case of fire, toxic gases (CO, CO2, NOx) may be formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance	Potassium Hydroxide
Acute toxicity	**Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Oral **Value:** 333 mg/kg **Animal test species:** rat
Other toxicological data	Toxicological tests on the product has not been performed.

Other information regarding health hazards

Assessment of acute toxicity, classification	No evidence for acute toxicity.
Inhalation	Aerosols may be corrosive.
Skin contact	Strongly corrosive. May cause deep tissue damage.
Eye contact	Strongly corrosive. Causes severe burns. Immediate first aid is imperative. May cause permanent damage to the eyes, especially if the product is not washed away IMMEDIATELY.
Ingestion	May cause burns in mucous membranes, throat, oesophagus and stomach.
Sensitisation	No evidence for respiratory nor skin sensitization.
Mutagenicity	No evidence for germ cell mutagenicity.
Carcinogenicity, other information	No evidence for carcinogenicity.
Reproductive toxicity	No evidence for reproductive toxicity.
Assessment of specific target organ SE, classification	No evidence for STOT-single exposure.

Assessment of specific target organ toxicity RE, classification	No evidence for STOT-repeated exposure.
Assessment of aspiration hazard, classification	No evidence for aspiration hazard.

Symptoms of exposure

Symptoms of overexposure	No specific symptoms noted.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Sodium hydroxide
Acute aquatic, fish	**Value:** 125 mg/l **Species:** Gambusia Affinis **Method:** LC50
Substance	Potassium Hydroxide
Acute aquatic, fish	**Value:** 80 mg/l **Test duration:** 96h **Species:** GAMBUSIA AFFINIS **Method:** LC50
Substance	Sodium hydroxide
Acute aquatic, Daphnia	**Value:** 40,4 mg/l **Test duration:** 48h **Species:** ceriodaphnia sp. **Method:** EC50
Ecotoxicity	Large amounts of the product may affect the acidity (pH-factor) in water with possible risk of harmful effects to aquatic organisms.
Aquatic, comments	No data available for the product.

12.2. Persistence and degradability

Chemical oxygen demand (COD)	Value: < 50 mg O/g
Persistence and degradability, comments	The product is biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential	The product is not bioaccumulating.

12.4. Mobility in soil

Mobility	The product is water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Environmental details, summation	For this product no classification is required for environmental hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Do not empty into drains. Dispose of this material, waste, residues and packaging in accordance with local authority requirements.

SECTION 14: Transport information

14.1. UN number

ADR / RID / ADN	1719
IMDG	1719
ICAO / IATA	1719

14.2. UN proper shipping name

Proper shipping name english ADR / RID / ADN	CAUSTIC ALKALI LIQUID, N.O.S.
ADR / RID / ADN	CAUSTIC ALKALI LIQUID, N.O.S.
Technical name / danger releasing substance ADR / RID / ADN	Sodium hydroxide, Potassium hydroxide
IMDG	CAUSTIC ALKALI LIQUID, N.O.S.
Technical name / danger releasing substance IMDG	Sodium hydroxide, Potassium hydroxide
ICAO / IATA	CAUSTIC ALKALI LIQUID, N.O.S.
Technical name / danger releasing substance ICAO	Sodium hydroxide, Potassium hydroxide
Comments	This material is classified as Dangerous Goods Class 8 Corrosive Substances according to the Australien Code for Transport af Dangerous Goods by Road andRail (7th edition) Class 8 Dangerous Goods are incompatible in placard load with any of the following: -Class 1, Explosives -Division 4.3, Dangerous When Wet Substanses -Division 5.1, Oxidising substances -Division 5.2, Organic Peroxides -Class 6, Toxic or Infectious Substances, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids -Class 7, Radioactive Substances and are incompatible with food and food packaging in any quantity. Strong acids must not be loaded in the same freight container or on the same vehicle with strong alkalis. Packing Group I and II acids and alkalis should be considered strong.

14.3. Transport hazard class(es)

ADR / RID / ADN	8
Classificaton code ADR / RID / ADN	C5
IMDG	8
ICAO / IATA	8

14.4. Packing group

ADR / RID / ADN	II
IMDG	II
ICAO / IATA	II
Comments	HAZCHEM Code: 2R

14.5. Environmental hazards

IMDG Marine pollutant	No

14.6. Special precautions for user

Special safety precautions for user	Not relevant.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Product name	CAUSTIC ALKALI LIQUID, N.O.S.

Additional information

ADR / RID / ADN hazard label	8
IMDG Hazard label	8
ICAO / IATA Hazard label	8

ADR / RID - Other information

Tunnel restriction code	E
Transport category	2
Hazard No.	80
RID other applicable information	80

IMDG / ICAO / IATA Other information

EmS	F-A, S-B

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

Other label information	Regulatory information Classified as Hazardous according to the Globally Harmonised System of

	Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia. Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP). Poisons Schedule S6

15.2. Chemical safety assessment

Chemical safety assessment performed	No

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.
Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Eye Dam. 1; H318 Skin Corr. 1A; H314
Training advice	No particular training or education is required but the user must be familiar with this SDS. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.
Additional information	READY-TO-USE MIXTURE: 0,5 - 3 %: H314 Causes severe skin burns and eye damage.
Key literature references and sources for data	Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice Standard for the Uniform Scheduling of Medicines and Poisons. Australian Code for the Transport of Dangerous Goods by Road & Rail. Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals. Workplace exposure standards for airborne contaminants, Safe work Australia. American Conference of Industrial Hygienists (ACGIH) Globally Harmonised System of classification and labelling of chemicals.
Information added, deleted or revised	Revised-new safety data sheet.
User notes	Contact Person/Point The company has taken care in compiling this information. No liability is accepted whether direct or indirect from its application since the conditions of final use are outside the Company's control. The end user is obliged to conform to relevant government regulations and/or patent laws applicable in their respective States of Countries.
Version	2.3
Prepared by	ALM
Comments	END OF SDS