

SAFETY DATA SHEET

Hyline HLU-33

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

1.1. Product identifier

Trade name

Hyline HLU-33

Product no.

72232

Unique formula identifier (UFI)

1630-40SV-R004-AXQ6

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

Relevant identified uses of the substance or mixture

Alkaline dishwashing liquid for dishwashers.

Use descriptors (UK REACH)

Sectors of use	Description
LCS "IS"	Industrial uses: Uses of substances as such or in preparations at industrial sites
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Product category	Description
PC35	Washing and Cleaning Products (including solvent based products)
Process category	Description
PROC2	Use in closed, continuous process with occasional controlled exposure
Environmental release category	Description
ERC8a	Wide dispersive indoor use of processing aids in open systems

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

HOBART GmbH
Robert-Bosch-Strasse 17
DE-77656 Offenburg
Germany

E-mail

hyline@hobart.de

Revision

27/01/2023

SDS Version

1.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).

See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin Corr. 1A; H314, Causes severe skin burns and eye damage.

Eye Dam. 1; H318, Causes serious eye damage.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

Causes severe skin burns and eye damage. (H314)

Safety statement(s)

General

-

Prevention

Wear eye protection/protective gloves/protective clothing. (P280)

Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. (P303+P361+P353)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. (P305+P351+P338)

Immediately call a POISON CENTER/doctor. (P310)

Storage

-

Disposal

-

Hazardous substances

Disodium metasilicate, pentahydrate

Potassium Hydroxide

Sodium hydroxide

Additional labelling

UFI: 1630-40SV-R004-AXQ6

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Disodium metasilicate, pentahydrate	CAS No.: 10213-79-3 EC No.: 229-912-9 UK-REACH: Index No.:	5 - 15 %	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335	
Potassium Hydroxide	CAS No.: 1310-58-3 EC No.: 215-181-3 UK-REACH: Index No.: 019-002-00-8	1 - 5 %	Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1B, H314 (SCL: 2.00 %) Skin Corr. 1A, H314 Skin Irrit. 2, H315 (SCL: 0.50 %) Eye Irrit. 2, H319 (SCL: 0.50 %)	
Sodium hydroxide	CAS No.: 1310-73-2 EC No.: 215-185-5 UK-REACH: Index No.:	1 - 5 %	Met. Corr. 1, H290 Skin Corr. 1B, H314 (SCL: 2.00 %) Skin Corr. 1A, H314 Skin Irrit. 2, H315 (SCL: 0.50 %) Eye Dam. 1, H318 (SCL: 2.00 %) Eye Irrit. 2, H319 (SCL: 0.50 %)	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

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Labelling of contents according to Detergents Regulation (EC) No 648/2004 as retained and amended in UK law

5% - 15%

· Phosphates

< 5%

· Polycarboxylates

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Flush exposed area with water for a long time - at least 30 minutes. It may be necessary to flush for several hours. Use a comfortable water temperature (20-30 °C). Contact Poison Information/doctor/hospital for further advice on follow-up and treatment.

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit returning mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Not applicable.

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

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Some metal oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

Hazchem Code: 2R

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid direct contact with the product.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

-15 - 35 °C

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Potassium Hydroxide

Short term exposure limit (15 minutes) (mg/m³): 2

Sodium hydroxide

Short term exposure limit (15 minutes) (mg/m³): 2

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

Potassium Hydroxide

Duration	Route of exposure	DNEL
Long term – Local effects - General population	Inhalation	1 mg/m ³
Long term – Local effects - Workers	Inhalation	1 mg/m ³

Potassium triphosphate

Duration	Route of exposure	DNEL
Long term – Systemic effects - General population	Inhalation	1.45 mg/m ³
Long term – Systemic effects - Workers	Inhalation	5.88 mg/m ³
Long term – Systemic effects - General population	Oral	70 mg/kg bw/day

Sodium hydroxide

Duration	Route of exposure	DNEL
Short term – Local effects - General population	Dermal	2 %
Long term – Local effects - General population	Inhalation	1 mg/m ³
Long term – Local effects - Workers	Inhalation	1 mg/m ³

PNEC

No data available.

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure


Keep damming materials near the workplace. If possible, collect spillage during work.

8.3. Individual protection measures, such as personal protective equipment


Generally

Use only UKCA marked protective equipment.


Respiratory Equipment

Type	Class	Colour	Standards	
In case of inadequate ventilation use suitable respirator - B/P2			EN143/EN149	


Skin protection

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Butyl rubber (≥0,5 mm). Neoprene (≥0,5 mm). Nitrile rubber (≥0,4 mm).	0,4 - 0,5	≥480	EN374	

Eye protection

Type	Standards	
Safety glasses	EN166	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Yellowish

Odour / Odour threshold

Testing not relevant or not possible due to the nature of the product.

pH

> 13,0

pH in solution

11.5 (0,2%)

Density (g/cm³)

~ 1,25

Kinematic viscosity

Testing not relevant or not possible due to the nature of the product.

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

Testing not relevant or not possible due to the nature of the product.

Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

Boiling point (°C)

Testing not relevant or not possible due to the nature of the product.

Vapour pressure

Testing not relevant or not possible due to the nature of the product.

Relative vapour density

Testing not relevant or not possible due to the nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)

Testing not relevant or not possible due to the nature of the product.

Ignition (°C)

Testing not relevant or not possible due to the nature of the product.

Auto flammability (°C)

Testing not relevant or not possible due to the nature of the product.

Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to the nature of the product.

Solubility

Solubility in water

Testing not relevant or not possible due to the nature of the product.

n-octanol/water coefficient

Testing not relevant or not possible due to the nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

9.2. Other information

VOC (g/l)

0

Other physical and chemical parameters

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

Acute toxicity

Product/substance	Disodium metasilicate, pentahydrate
Test method	
Species	Rat

Route of exposure Test Result Other information	Oral LD50 1152 -1349 mg/kg
Product/substance Test method Species Route of exposure Test Result Other information	Disodium metasilicate, pentahydrate Rat Inhalation LC50 > 2,06 g/m3
Product/substance Test method Species Route of exposure Test Result Other information	Disodium metasilicate, pentahydrate Dermal LD50 > 5000 mg/kg
Product/substance Test method Species Route of exposure Test Result Other information	Potassium tripolyphosphate Rat Oral LD50 > 2000 mg/kg
Product/substance Test method Species Route of exposure Test Result Other information	Potassium Hydroxide Rat Oral LD50 333 mg/kg
Product/substance Test method Species Route of exposure Test Result Other information	Polyacrylic acid sodium salt OECD 401 Rat LD50 >5000 mg/kg bw/day
Product/substance Test method Species Route of exposure Test Result Other information	Polyacrylic acid sodium salt Rabbit LD50 >5000 mg/kg bw/day
Skin corrosion/irritation	
Product/substance Test method Species Duration Result Other information	Sodium hydroxide No data available. Adverse effect observed (Corrosive)
Causes severe skin burns and eye damage.	
Serious eye damage/irritation	
Product/substance Test method Species Duration Result Other information	Sodium hydroxide No data available. Adverse effect observed (Causes serious eye damage)

Causes serious eye damage.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

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.

11.2. Information on other hazards

Long term effects

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

Endocrine disrupting properties

No evidence for endocrine disrupting properties.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	Disodium metasilicate, pentahydrate
Test method	
Species	Fish, Brachydanio rerio
Compartment	
Duration	No data available.
Test	
Result	210 mg/l
Other information	

Product/substance	Disodium metasilicate, pentahydrate
Test method	EC50
Species	Crustacean, Daphnia magna
Compartment	
Duration	No data available.
Test	
Result	1700 mg/l
Other information	

Product/substance	Potassium tripolyphosphate
Test method	LC0
Species	Fish, Golden Orfey
Compartment	
Duration	No data available.
Test	
Result	~ 800 mg/l
Other information	

Product/substance	Potassium Hydroxide
Test method	LC50
Species	Fish, Gambusia affinis
Compartment	
Duration	No data available.
Test	
Result	80 mg/l
Other information	

Product/substance	Sodium hydroxide
Test method	LC50
Species	Fish
Compartment	
Duration	96 hours
Test	
Result	35 - 189 mg/l
Other information	

Product/substance	Sodium hydroxide
Test method	EC50
Species	Crustacean, Ceriodaphnia dubia
Compartment	
Duration	No data available.
Test	
Result	40,4 mg/l
Other information	

Product/substance	Polyacrylic acid sodium salt
Test method	DIN 38412
Species	Leuciscus idus
Compartment	
Duration	
Test	LC50
Result	>100 mg/L
Other information	

Product/substance	Polyacrylic acid sodium salt
Test method	
Species	Algae, Selenastrum capricornutum
Compartment	
Duration	
Test	LC50
Result	>100 mg/L
Other information	

12.2. Persistence and degradability

The product is easily biodegradable.

12.3. Bioaccumulative potential

The product is not bioaccumulating

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties

No evidence for endocrine disrupting properties.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 8 – Corrosive

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

07 06 01* Aqueous washing liquids and mother liquors




Specific labelling

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
ADR	UN1719	CAUSTIC ALKALI LIQUID, N.O.S. (Disodium metasilicate, pentahydrate, Sodium hydroxide)	Class: 8 Labels: 8 Classification code: C5 	II	No	Limited quantities: 1 L Tunnel restriction code: (E) See below for additional information.
IMDG	UN1719	CAUSTIC ALKALI LIQUID, N.O.S. (Disodium metasilicate, pentahydrate, Sodium hydroxide)	Class: 8 Labels: 8 Classification code: C5 	II	No	Limited quantities: 1 L EmS: F-A S-B See below for additional information.
IATA	UN1719	CAUSTIC ALKALI LIQUID, N.O.S. (Disodium metasilicate, pentahydrate, Sodium hydroxide)	Class: 8 Labels: 8 Classification code: C5 	II	No	See below for additional information.

* Packing group

** Environmental hazards

Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

Hazchem Code: 2R

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Additional information

Not applicable.

Sources

The Management of Health and Safety at Work Regulations 1999.

Regulation (EC) No 648/2004 on detergents as retained and amended in UK law.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H290, May be corrosive to metals.
H302, Harmful if swallowed.
H314, Causes severe skin burns and eye damage.
H315, Causes skin irritation.
H318, Causes serious eye damage.
H319, Causes serious eye irritation.
H335, May cause respiratory irritation.

The full text of identified uses as mentioned in section 1

LCS "IS" = Industrial uses: Uses of substances as such or in preparations at industrial sites
LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
PROC2 = Use in closed, continuous process with occasional controlled exposure
PC35 = Washing and Cleaning Products (including solvent based products)
ERC8a = Wide dispersive indoor use of processing aids in open systems

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

▼ The safety data sheet is validated by

SUSM

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en