

Safety Data Sheet

according to Regulation (EC) No 1907/2006

HYLINE HLU-32

Revision date: 24.10.2018

Product code:

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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

Professional: Cleaning agent, alkaline.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	HOBART GmbH		
Street:	Robert-Bosch-Strasse 17		
Place:	D-77656 Offenburg		
Telephone:	+49 (0) 781.600-0	Telefax:	+49 (0) 781.600-23 19
e-mail:	info@hobart.de		
Internet:	www.hobart.de		
Responsible Department:	Dr. Gans-Eichler	e-mail:	info@tge-consult.de
	Chemieberatung GmbH	Tel.:	+49(0)251/394868-69
	Raesfeldstr. 22		www.tge-consult.de
	D-48149 Münster		

1.4. Emergency telephone number:

Giftnotruf (Poison Center) Berlin: +49 (0) 30 30686700

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes severe skin burns and eye damage.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

Sodium hydroxide; caustic soda

potassium hydroxide

Signal word: Danger**Pictograms:****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): Take off immediately all contaminated clothing. Rinse skin with water or 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.

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P310

Immediately call a POISON CENTER/doctor.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
1310-73-2	Sodium hydroxide; caustic soda			30 - 60 %
	215-185-5	011-002-00-6	01-2119457892-27	
	Met. Corr. 1, Skin Corr. 1A; H290 H314			
1310-58-3	caustic potash, potassium hydroxide			1 - < 5 %
	215-181-3	019-002-00-8	01-2119487136-33	
	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1A; H290 H302 H314			

Full text of H and EUH statements: see section 16.

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician. In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray, Pulmicort-dosage-spray. (Auxiloson and Pulmicort are registered trademarks).

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. In case of skin irritation, consult a physician.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Observe risk of aspiration if vomiting occurs. Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice.

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

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

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

First Aid, decontamination, treatment of symptoms.

In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray, Pulmicort-dosage-spray. (Auxiloson and Pulmicort are registered trademarks).

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SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Sand. Foam. Carbon dioxide (CO₂). Extinguishing powder. In case of major fire and large quantities: Water spray jet. Water mist.

Unsuitable extinguishing media

High power water jet

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide Carbon dioxide (CO₂). Phosphorus oxides.

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment (refer to section 8).

Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.

High slip hazard because of leaking or spilled product.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Wear suitable protective clothing. (See section 8.)

Conditions to avoid: aerosol or mist formation

Avoid contact with skin, eyes and clothes.

Do not mix with acids.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Further information on handling

Advices on general occupational hygiene refer to chapter 8

Shelf Life (months): 36

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Unsuitable materials for Container: Aluminium. Zinc.

Keep only in the original container in a cool, well-ventilated place away from acids. Keep container tightly closed.

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Handle and open container with care.

Make sure spills can be contained (e.g. sump pallets or kerbed areas).

Suitable floor material: Leachate-proof.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Radioactive substances. Infectious substances.

Further information on storage conditions

Recommended storage temperature: (-15) - 35°C

Protect against: Light. UV-radiation/sunlight. heat. moisture.

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
1310-58-3	Potassium hydroxide	-	2		STEL (15 min)	WEL
1310-73-2	Sodium hydroxide	-	2		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
1310-73-2	Sodium hydroxide; caustic soda			
Worker DNEL, long-term		inhalation	local	1 mg/m ³
Consumer DNEL, long-term		inhalation	local	1 mg/m ³
1310-58-3	caustic potash, potassium hydroxide			
Worker DNEL, long-term		inhalation	local	1 mg/m ³
Consumer DNEL, long-term		inhalation	local	1 mg/m ³

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation.

Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff.

Wash hands before breaks and after work. Remove contaminated clothing immediately and dispose off safely.

Eye/face protection

Suitable eye protection: Tightly sealed safety glasses.,

Eye-shade. DIN EN 166

Hand protection

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

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Breakthrough time \geq 8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time \geq 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Protective clothing: Protective apron.

Standard: Protective clothing: EN 136, EN 137, EN 140, EN 143, EN 149, EN 405, EN 12941, EN 12942, EN 14387

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

-exceeding exposure limit values

-insufficient ventilation and aerosol or mist formation

Suitable respiratory protective equipment: particulates filter device (DIN EN 143). Type: P1-3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

Environmental exposure controls

The product needs to apply neutralizing agents before draining to wastewater treatment plants.

This material and its container must be disposed of in a safe way.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	colourless - light yellow
Odour:	characteristic
pH-Value:	> 13 ; 12,5 (1 %in aqueous solution)

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	~ 100 °C
Sublimation point:	No information available.
Softening point:	No information available.
Pour point:	No information available.
Flash point:	not determined
Sustaining combustion:	No data available

Flammability

Solid:	No information available.
Gas:	No information available.

Explosive properties

none

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Lower explosion limits: not determined
Upper explosion limits: not determined
Ignition temperature: not determined

Auto-ignition temperature

Solid: No information available.
Gas: No information available.

Decomposition temperature: No information available.

Oxidizing properties

none

Vapour pressure: not determined
(at 20 °C)

Vapour pressure: No information available.
(at 50 °C)

Density (at 20 °C): 1,40 g/cm³

Bulk density: No information available.

Water solubility: not determined

Solubility in other solvents

miscible.

Partition coefficient: No information available.

Viscosity / dynamic: < 100 mPa·s

Viscosity / kinematic: not determined

Flow time: not determined

Vapour density: not determined

Evaporation rate: not determined

Solvent separation test: not determined

Solvent content: not determined

9.2. Other information

Solid content: not determined

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Reacts with : Strong acid.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Aluminium. Zinc. Strong acid

10.6. Hazardous decomposition productsCan be released in case of fire: Carbon monoxide Carbon dioxide (CO₂). Phosphorus oxides.**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

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Toxicokinetics, metabolism and distribution

No information available.

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1310-58-3	caustic potash, potassium hydroxide				
	oral	LD50 333 mg/kg	Rat	ECHA	

Irritation and corrosivity

Causes severe skin burns and eye damage.

Sensitising effects

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

The product is not: sensitising.

The statement is derived from the properties of the components.

Carcinogenic/mutagenic/toxic effects for reproduction

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

No experimental indications of mutagenicity in-vitro exist.

The statement is derived from the properties of the components.

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.

Specific effects in experiment on an animal

No information available.

Practical experience

Observations relevant to classification

No information available.

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
1310-73-2	Sodium hydroxide; caustic soda					
	Acute fish toxicity	LC50 45,4 mg/l	96 h	Onchorhynchus mykiss	IUCLID	
	Acute crustacea toxicity	EC50 40,4 mg/l	48 h	Ceriodaphnia sp.	ECHA Dossier	

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

The statement is derived from the properties of the components.

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12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Dispose of waste according to applicable legislation. The product needs to apply neutralizing agents before draining to wastewater treatment plants. Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Control report for waste code/ waste marking according to EAKV:

Waste disposal number of waste from residues/unused products

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; hazardous waste

Waste disposal number of used product

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; hazardous waste

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number:**

UN 1719

14.2. UN proper shipping name:

CAUSTIC ALKALI LIQUID, N.O.S. (sodium hydroxide, potassium hydroxide)

14.3. Transport hazard class(es):

8

14.4. Packing group:

II

Hazard label:

8



Classification code:

C5

Special Provisions:

274

Limited quantity:

1 L

Excepted quantity:

E2

Transport category:

2

Hazard No:

80

Tunnel restriction code:

E

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Inland waterways transport (ADN)

14.1. UN number: UN 1719
14.2. UN proper shipping name: CAUSTIC ALKALI LIQUID, N.O.S. (sodium hydroxide, potassium hydroxide)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Classification code: C5
Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 1719
14.2. UN proper shipping name: CAUSTIC ALKALI LIQUID, N.O.S. (Sodium Hydroxide, Potassiumhydroxide)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Marine pollutant: no
Special Provisions: 274
Limited quantity: 1 L
Excepted quantity: E2
EmS: F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1719
14.2. UN proper shipping name: CAUSTIC ALKALI LIQUID, N.O.S. (Sodium Hydroxide, Potassiumhydroxide)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Special Provisions: A3 A803
Limited quantity Passenger: 0.5 L
Passenger LQ: Y840
Excepted quantity: E2
IATA-packing instructions - Passenger: 851
IATA-max. quantity - Passenger: 1 L
IATA-packing instructions - Cargo: 855
IATA-max. quantity - Cargo: 30 L

14.5. Environmental hazards

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ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Safe handling: see section 7

Personal protection equipment: see section 8

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not relevant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

2010/75/EU (VOC): No information available.

2004/42/EC (VOC): No information available.

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

REACH 1907/2006 Appendix XVII, No (mixture): 3

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

Sodium hydroxide; caustic soda

caustic potash, potassium hydroxide

SECTION 16: Other information**Changes**

Rev. 1,0: 29.02.2012

Rev. 1,01: 02.05.2012

Rev. 1,02: 14.05.2012

Rev. 1,10: 16.06.2016 ; Changes in chapter: 1-16

Rev. 2,00: 24.10.2018 ; Changes in chapter: 1-16

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

CAS Chemical Abstracts Service

DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level

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NOAEC: No observed adverse effect level

NTP: National Toxicology Program

N/A: not applicable

OSHA: Occupational Safety and Health Administration

PNEC: predicted no effect concentration

PBT: Persistent bioaccumulative toxic

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

SARA: Superfund Amendments and Reauthorization Act

SVHC: substance of very high concern

TRGS Technische Regeln fuer Gefahrstoffe

TSCA: Toxic Substances Control Act

VOC: Volatile Organic Compounds

VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe

WGK: Wassergefährdungsklasse

Relevant H and EUH statements (number and full text)

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Further Information

Classification according EC regulation 1272/2008 (CLP): - Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)