SAFETY DATA SHEET
FLUXCLEAN No 1

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

1.1. Product identifier

Product name FLUXCLEAN No 1

Product number HLF24

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

Identified uses Caustic Detergent. For professional use only.

Uses advised against Not for direct contact with Food or Beverage stuffs. Not for oral consumption. Not for use by hand.

1.3. Details of the supplier of the safety data sheet

Supplier UK - Holchem Laboratories Ltd. Gateway House, Pilsworth Road, Bury, BL9 8RD
Tel : +44 (0) 1706 222288; e-mail info@holchem.co.uk
EU - Kersia Deutschland GmbH, Marie-Curie-Straße 23
53332 Bornheim - Sechtem

1.4. Emergency telephone number

Emergency telephone Emergency Information:-
For accidents and spillages involving this product that pose a threat to the environment, or human health, or require immediate first aid advice call:- +44(0) 1865 407333.
Note:- This number will not accept order queries or calls dealing with equipment breakdowns. This product is registered with the NPIS. UK Environment Agency 24hour Advisory Service 0800 807060. Irish Environmental Protection Agency 1890 335599 (This is a Lo Call Number) Ireland - For information or to report a poisoning incident contact The National Poisons Information Centre (01 8092166).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Met. Corr. 1 - H290

Health hazards Skin Corr. 1A - H314 Eye Dam. 1 - H318

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms

Signal word Danger

Hazard statements H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

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Precautionary statements	P234 Keep only in original packaging. P280 Wear protective clothing, gloves, eye and 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. P313 Get medical advice/ attention. P501 Dispose of contents/ container in accordance with national regulations.
Contains	SODIUM HYDROXIDE, GLYCOSIDE, POTASSIUM HYDROXIDE, ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT
Detergent labelling	5 - < 15% non-ionic surfactants, < 5% EDTA and salts thereof
Supplementary precautionary statements	P404 Store in a closed container.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. Note:- H290 May be Corrosive to Metals Classification relates to Soft Metals such as Aluminium and Copper, when used correctly this product is not expected to be corrosive to 304 and 316 Stainless Steel.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

SODIUM HYDROXIDE **10-30%**

CAS number: 1310-73-2 | EC number: 215-185-5 | REACH registration number: 01-2119457892-27

Classification
Met. Corr. 1 - H290
Skin Corr. 1A - H314
Eye Dam. 1 - H318

GLYCOSIDE **5-10%**

CAS number: —

Classification
Eye Dam. 1 - H318

POTASSIUM HYDROXIDE **1-5%**

CAS number: 1310-58-3 | EC number: 215-181-3 | REACH registration number: 01-2119487136-33

Classification
Met. Corr. 1 - H290
Acute Tox. 4 - H302
Skin Corr. 1A - H314
Eye Dam. 1 - H318

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ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT		1-5%
CAS number: 64-02-8	EC number: 200-573-9	REACH registration number: 01-2119486762-27

Classification
Met. Corr. 1 - H290
Acute Tox. 4 - H302
Acute Tox. 4 - H332
Eye Dam. 1 - H318
STOT RE 2 - H373

DECYL DIMETHYL AMINE OXIDE		<1%
CAS number: 2605-79-0	EC number: 220-020-5	
M factor (Acute) = 1		

Classification
Acute Tox. 4 - H302
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
Aquatic Acute 1 - H400
Aquatic Chronic 2 - H411

The full text for all hazard statements is displayed in Section 16.

Composition comments To the best of our knowledge, all of the substances used in this product are being supported for the relevent application in REACH. Note:- H290 "May be Corrosive to Metals" refers to the neat product.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information For immediate First Aid advice in the UK, dial 111. When it is safe to do so, remove victim immediately from source of exposure. However, consideration should be given as to whether moving the victim will cause further injury.

Inhalation Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention if any discomfort continues.

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Place unconscious person on the side in the recovery position and ensure breathing can take place. Get medical attention.

Skin contact Remove contaminated clothing that is not stuck to the skin. Flush area with clean water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Eye contact Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue.

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

General information Neat product may cause chemical burns and permanent eye damage. Dilute product may cause irritation to the skin and eyes.

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Inhalation	Inhalation of neat product is unlikely. However, inhalation of mists or vapours of diluted product may result in soreness, irritation or burns to the mouth, nose and respiratory tract.
Ingestion	Unlikely route of exposure without deliberate abuse. If neat chemical is ingested, chemical burning of mouth, throat and GI tract will occur. If dilute chemical is ingested, soreness of mouth, throat and GI tract may occur together with redness and blistering.
Skin contact	May cause serious chemical burns to the skin.
Eye contact	May result in permanent eye damage.

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

Notes for the doctor	Rinse well with water to neutral pH. Contains Chelating agents, Sodium Hydroxide and Potassium Hydroxide in Aqueous solution.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is non-combustible. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	The product is non-combustible. If heated, corrosive vapours may be formed. In contact with some metals (Aluminium, Zinc and their Alloys) Hydrogen Gas is formed, which may form an explosive mixture with air. Mixing with Hypochlorite based chemicals could result in a dangerous heating of the solution and evolution of Carbon Dioxide and Oxygen.
Hazardous combustion products	Does not decompose when used and stored as recommended.

5.3. Advice for firefighters

Protective actions during firefighting	Protective clothing and respiratory protection should be worn when tackling fires involving this product. Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions	Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Reference to other sections	See sections 8,12 & 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. Read and follow manufacturer's recommendations.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep container tightly closed. Keep only in the original container. Store in a demarcated bunded area to prevent release to drains and/or watercourses. Keep above chemical's freezing (melting) point. Store away from:- Acids. Chlorinated Detergents and Disinfectants.

7.3. Specific end use(s)

Specific end use(s) Detergent, refer to Product Information Sheet for full details.

Usage description This product is suitable for cleaning food process plants, it is not suitable for direct food contact.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL Industry - Inhalation; Long term local effects: 1.0 mg/m³
DNEL data for Professional users is not yet available, but it is assumed to be the same as for Industrial users.
Industry - Dermal; Short term local effects: 2%

PNEC No information is available for PNEC data for Sodium Hydroxide

GLYCOSIDE

DNEL Professional - Dermal; Long term systemic effects: 595000 mg/kg bw/day
Professional - Inhalation; Long term systemic effects: 420 mg/m³

PNEC - Fresh water; 0.1 mg/l
- marine water; 0.01 mg/l
- Sediment (Freshwater); 0.487 mg/kg dwt
- Sediment (Marinewater); 0.048 mg/kg dwt

ETHYLENEDIAMINETETRAACETIC ACID TETRASODIUM SALT (CAS: 64-02-8)

DNEL Professional - Inhalation; Long term systemic effects: 1.5 mg/m³

PNEC - Fresh water; 2.86 mg/l
- marine water; 0.286 mg/l
- Intermittent release; 1.56 mg/l
- Soil; 0.937 mg/kg, mg/kg dwt
- STP; 55.94 mg/kg

SODIUM C14-C17 SECONDARY ALKYL SULPHONATE (CAS: 97489-15-1)

DNEL Professional - Dermal; Short term local effects: 2,8 mg/cm2
Professional - Dermal; Long term systemic effects: 5mg/Kg bw/day
Professional - Inhalation; Long term systemic effects: 35mg/m3
- Dermal; Long term local effects: 2.8 mg/cm²

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PNEC	- Sediment (Marinewater); 0.94 mg/kg dw - Soil; 9.4mg/Kg dw - Intermittent release; 0.06mg/l - Sediment (Freshwater); 9.4 mg/Kg dw - Fresh water; 0.04mg/l - STP; 600mg/l - marine water; 0.004mg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.
Personal protection	The PPE indicated above is not a COSHH assessment. It represents PPE that should be considered during the manufacture, distribution, use and final disposal stages of this product's life cycle. It is the responsibility of employers to conduct a COSHH/risk assessment to determine appropriate PPE levels. The information given below should be used to support this assessment. Where possible replace manual processes with automated or closed processes to minimise contact with the product.
Eye/face protection	The following protection should be worn: Full face visor or shield. Refer to EN Standard 166 to select appropriate level of protection.
Hand protection	Impervious Chemical Resistant Gloves of Butyl Rubber, PVC, Polychloroprene with a natural latex liner, all with a minimum material thickness 0.5mm and a breakthrough time of >480mins. Alternatively Nitrile Rubber, Fluorinated Rubber, both with a minimum thickness of 0.35 - 0.4mm and a breakthrough time of >480minutes. Refer to Standard EN 374 and EN 16523
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible. Reference to EN 13832 and EN 943 is useful when selecting footwear and clothing.
Hygiene measures	Promptly remove non-impervious clothing that has become contaminated, provided it is not adhered to the skin. Provide eyewash station and safety shower.
Respiratory protection	No specific recommendation made, but respiratory protection must be used if the general level exceeds the Workplace Exposure Limit. In the case of dust or aerosol formation (eg spraying), or vapour from hot vessels, use respiratory protection with an approved filter (P2).
Environmental exposure controls	Do not allow the substance to contaminate surface water/ground water. See points 6, 12 &13. Discharge of solutions into effluent systems (including municipal drains) or to surface water are expected to cause significant pH changes. Discharge of solutions should be carried out such that pH changes are minimised. Where necessary pH buffering measures should be adopted. Users of this product should consult local drainage and permitting authorities to ensure that any restrictions or discharge consents are adhered to.
General Health and Safety Measures.	The above requirements refer to the neat chemical. In-use solutions may have a lower classification, however, a full risk assessment should be carried out before handling any chemical(s). Risk assessments should refer to COSHH and any other relevant legislation or industry specific guidelines governing the use of chemicals.

SECTION 9: Physical and chemical properties

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9.1. Information on basic physical and chemical properties

Appearance	Clear to Hazy Amber Liquid
Colour	Amber.
Odour	Slight Ammoniacal
Odour threshold	Not applicable.
pH	pH (diluted solution): 12 - 13 @ 1%
Melting point	Not applicable.
Initial boiling point and range	Not applicable.
Flash point	Not available.
Evaporation rate	Not applicable.
Evaporation factor	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	1.28 @ 20 Degrees C
Bulk density	Not applicable.
Solubility(ies)	Soluble in water.
Partition coefficient	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable.
Viscosity	Not determined.
Explosive properties	Not applicable.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Refractive index	Not applicable.
Particle size	Not applicable.
Molecular weight	Not applicable.
Volatility	Not applicable.
Saturation concentration	Not applicable.
Critical temperature	Not applicable.
Volatile organic compound	Not applicable.

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Explosive Properties	Not Classified as Explosive
Storage Temperature Range	+5 to +40 degrees C

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Not expected to react when correctly stored and used. Mixing with other chemicals may produce unexpected reactions. Reactions with the following materials may generate heat: Strong acids.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended. - See note 10.6.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Refer to section 10.1. Do not mix with Hypochlorite based chemicals, this could result in a dangerous heating of the solution. Do not mix with acids, this will generate heat and give off corrosive vapours.

10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid	Strong acids. Reaction with Aluminium, Zinc, Tin, Copper or their alloys produces flammable Hydrogen Gas.

10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended. - See section 10.5.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	9,132.42

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l)	78.95

Respiratory sensitisation

Respiratory sensitisation	No evidence of respiratory sensitisation for any component of this formulation.

Skin sensitisation

Skin sensitisation	No evidence of skin sensitisation for any component of this formulation.

Carcinogenicity

Carcinogenicity	The components of this formulation are corrosive to skin and the respiratory tract, but will not be systemically available in the body under normal conditions of handling. As a consequence it is not expected to cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility	The components of this formulation are corrosive to the skin and respiratory tract, but will not be systemically available in the body under normal conditions of use and handling. As a consequence it is not expected to be toxic to the reproductive system or the developing foetus.

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General information	Toxic effect linked with corrosive properties. See section 4.2.
Inhalation	Unlikely route of exposure. Inhalation of sprayed droplets may result in soreness of the throat, mouth and nose. - See section 4.2.
Ingestion	May cause chemical burns in mouth, oesophagus and stomach.
Skin contact	Causes severe burns.
Eye contact	Risk of serious damage to eyes. May cause permanent eye injury.

SECTION 12: Ecological information

Ecotoxicity This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Normal use is unlikely to pose a risk to the environment.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish This mixture is not classified as toxic to aquatic organisms.
Note:- pH values greater than 10.5 may be fatal to fish and other aquatic organisms, there may also be damage to aquatic plants.
Normal use of the diluted product is not expected to pose any risk.
See note 12.0

12.2. Persistence and degradability

Persistence and degradability The surfactant(s) used in this preparation complies (comply) with the biodegradability criteria as laid down in the European Detergents Regulation No 648/2004 as amended.

12.3. Bioaccumulative potential

Bioaccumulative potential Not expected to bioaccumulate.

Partition coefficient Not applicable.

12.4. Mobility in soil

Mobility The product contains substances which are water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be considered. Do not mix with other chemicals.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. |

Consideration should be given to water authority effluent permits.

SECTION 14: Transport information

14.1. UN number

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UN No. (ADR/RID)	1719
UN No. (IMDG)	1719
UN No. (ICAO)	1719

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE)
Proper shipping name (IMDG)	CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE)
Proper shipping name (ICAO)	CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE)
Proper shipping name (ADN)	CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE, POTASSIUM HYDROXIDE)

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID label	8
IMDG class	8
ICAO class/division	8

Transport labels

14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-A, S-B
Emergency Action Code	2R
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

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

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National regulations	UK Adoption and Implementation of the UN Globally Harmonised System (GHS) on Classification and Labelling of Chemicals (GB CLP) and considers UK National REACH legislation.
EU legislation	European Regulation (EC) No 1272/2008 (as amended) on Classification, Labelling and Packaging of Substances and Mixtures. Also considered is the REACH Regulation (EC) No.1907/2006 (as amended).

15.2. Chemical safety assessment

Pcs Information

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	(EC) No. 1272/2008 : EU Regulation on Classification, Labelling and Packaging of Substances and Mixtures. NPIS - National Poisons Information Service. vPvB - Very Persistent, Very bioaccumulative. PBT - Persistent, Bioaccumulative & Toxic. REACH - Registration, Evaluation, Authorisation & restriction of CHemicals (Regulation EC 1907/2006). DNEL - Derived No Effect Limit. PNEC - Predicted No Effect Concentration. COSHH - Control of Substances Hazardous to Health. Industry - Refers in section 8 to application of the substance in an industrial process. Professional - Refers in section 8 to application/use of the preparation/product in a skilled trade premises.
General information	This document is a Safety Data Sheet, NOT a CoSHH assessment. It is the customer's responsibility to conduct a full CoSHH assessment, taking into account the information held within this document along with other local factors considered in a risk assessment. The Risk and Hazard statements listed below are the full text of abbreviations used in this document. They are not the final classification, for this refer to section 2.
Revision comments	Amendment to the emergency phone number in Section 1.4.
Revision date	28/10/2021
Hazard statements in full	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.
REACH extended MSDS comments	REACH requires that persons handling chemicals should take the necessary risk management measures, in accordance with assessments from manufacturers and importers of chemical substances. The relevent recommendations must be passed along the supply chain. These assessments are generally reported in Exposure Scenarios. Where Exposure Scenarios have been provided for substances used in this product, the relevent information is incorporated into the safety data sheet.

END OF SAFETY DATA SHEET

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.