Product	Wash & Clean
Revision date	16 December 2022
Revision	1

Safety Data Sheet (SDS)

according to Regulation (EC) No. 1907/2006

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

1.1 Product identifier

Product name	**Wash & Clean**
Product no.	**HMWASH&CLEAN**
Other means of identification	No information available.

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

Identified uses	Cleaning Agent (Professional Use Only).
Uses advised against	Any other purpose.

1.3 Details of the supplier of the safety data sheet

Supplier	Kitchenmaster NI Ltd 11 Comber Road Belfast BT8 8AN United Kingdom Tel: 028 9081477 02890812881
Contact person	sales@kitchenmaster-ni.com

1.4 Emergency telephone number

Emergency telephone	Emergency Telephone Number: 028 9081 4777 08:30 – 17:00 Monday to Thursday 08:30 – 16:30 Friday

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008)	
Physical and chemical hazards	Me. Corr 1 - H290
Human health	Skin Corr. 1C - H314
Environment	Aquatic Chronic 3 - H412

2.2 Label elements

Contains	Didecyldimethylammonium chloride potassium hydroxide 2,2'-(octadec-9-enylimino)bisethanol sodium hydroxide
Detergent labeling	<5% non-ionic surfactants <5% cationic surfactants
Label in accordance with (EC) no. 1272/2008	
Signal word	Danger
Hazard statements	H314 Causes severe skin burns and eye damage. H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention
P260 Do not breathe dust/fume/ gas/mist/vapours/spray.
P280 Wear protective gloves/ protective clothing/eye protection/face protection.
Response
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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

None known.

Section 3: Composition/information on ingredients

3.1 Substance

Not applicable.

3.2 Mixtures

Name	Product identifier	Regulation (EC) No 1272/2008	%
Dodecyldimethylamine oxide	CAS-No.: 1643-20-5 EC No.: 216-700-6	Acute Tox 4 - H302, Skin Irrit.2 - H315, Eye Dam. 1 - H318, Aquatic Acute 1 - H400	1-5%
Didecyldimethylammonium chloride	CAS-No.: 7173-51-5 EC No.: 230-525-2 REACH Reg No.: 01-2119945987-15-XXXX	Acute Tox 3 - H301, Skin Corr. 1B - H314, Eye Dam. 1 - H318, STOT SE 3 - H336, Flam. Liq 3- H226, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	1-5%
propan-2-ol	CAS-No.: 67-63-0 EC No.: 200-661-7 REACH Reg No.: 01-2119457558-25-XXXX	Eye Irrit.2A - H319, Flam. Liq 2- H225, STOT SE 3 - H336	0.1-0.9%
potassium hydroxide	CAS-No.: 1310-58-3 EC No.: 215-181-3 REACH Reg No.: 01-2119487136-33-XXXX	Acute Tox 4 - H302, Skin Corr. 1A - H314, Me. Corr 1 - H290	0.1-0.9%
2,2'-(octadec-9-enylimino)bisethanol	CAS-No.: 25307-17-9 EC No.: 246-807-3 REACH Reg No.: 01-2119510876-35-XXXX	Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410, Acute Tox 4 - H302, Skin Corr. 1B - H314	0.1-0.9%
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, Me. Corr 1 - H290	<0.1%
Bornan-2-one	CAS-No.: 76-22-2 EC No.: 200-945-0	Acute Tox 4 - H302, Acute Tox 4 - H332, Skin Irrit.2 - H315, Eye Dam. 1 - H318, STOT SE 2 - H371, Flam. Sol 2- H228, Aquatic Chronic 2 - H411	<0.1%

The full text for all hazard statements are displayed in section 16.

Composition comments

The data shown are in accordance with the latest EC Directives.
Potassium hydroxide: Specific Concentration Limits = H315, Skin Irrit. 2 >= 0.5 - < 2; H319 Eye Irrit. 2 >= 0.5 - < 2; H314 Skin Corr. 1B >= 2 - < 5; H314 Skin Corr. 1A >= 5.
Sodium hydroxide, SCL - Skin Corr. 1A: C >= 5%; Skin Corr. 1B: C >= 2 - < 5%; Skin Irrit. 2: C >= 0.5 - < 2%; Eye Irrit. 2: C >= 0.5 - < 2%.

Section 4: First aid measures

4.1 Description of first aid measures

General information

Provide general first aid, rest, warmth and fresh air. As a general rule, in case of doubt or if symptoms persist, always call a doctor. Seek medical attention for all burns and eye injuries, regardless how minor they may seem. First aid personnel must be aware of own risk during rescue.

Inhalation

Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Ingestion	If this product is ingested, remove victim immediately from source of exposure. Rinse mouth thoroughly. Do not induce vomiting. Provide fresh air, warmth and rest. Get medical attention. Never give anything by mouth to an unconscious person.
Skin contact	Remove victim immediately from source of exposure. Wash the skin immediately with water. Remove contaminated clothing, shoes and jewelry and wash before reuse. Obtain medical attention if irritation persists or if blistering occurs.
Eye contact	Do not rub eye. If this product contacts the eyes, gently flush eyes with water for at least fifteen (15) minutes, lifting the upper and lower eyelids occasionally. Remove contact lenses if present and easy to do so. Avoid contaminating unaffected eye. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Inhalation of mist or vapor may cause respiratory tract irritation.
Ingestion	May cause chemical burns in mouth and throat. May cause severe internal injury.
Skin contact	Corrosive. Cause severe skin burns.
Eye contact	Corrosive to eyes. Causes severe eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to the physician	Treat symptomatically.

Section 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	High volume water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	When heated, toxic and corrosive vapours/gases may be formed. During fire, toxic gases (CO, CO2) are formed.
Unusual fire & explosion hazards	No unusual fire or explosion hazards noted. Water used for fire fighting may become corrosive in contact with the product.
Specific hazards	Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2).

5.3 Advice for firefighters

Special fire fighting procedures	If possible, fight fire from protected position. Avoid breathing fire vapours. Ventilate closed spaces before entering them. Containers close to fire should be removed immediately or cooled with water if safe to do so. Do not release runoff from fire to drains or watercourses.
Protective equipment for firefighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Eliminate all sources of ignition. Avoid inhalation of vapours and contact with skin and eyes. In case of inadequate ventilation, use respiratory protection. Do not touch or walk through spilled material. If necessary evacuate surrounding areas.
For emergency responders	Follow safe handling advice and personal protective equipment recommendations for normal use of product.

6.2 Environmental precautions

Environmental precautions	Do not discharge onto the ground or into water courses. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Protection Agency or local authority.

6.3 Methods and material for containment and cleaning up

Spill clean up methods Stop leak if possible without risk Eliminate all ignition sources. Ventilate and evacuate the area. When dealing with a spillage, wear necessary protective equipment. DO NOT touch spilled material! Cover drains.
Absorb spillage with non-combustible, inert absorbent material. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. Wash thoroughly after dealing with a spillage.

6.4 Reference to other sections

Reference to other sections See section 1 for emergency contact. For personal protection, see section 8. For waste disposal, see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handling Read and follow manufacturer's recommendations. Use proper personal protection when handling (refer to Section 8). Do not handle broken packages without protective equipment. Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Do not eat, drink or smoke when using the product. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Storage precautions Keep upright, locked up and out of reach of children. Keep the product in its original container. Store in cool dry areas away from direct sunlight or sources of ignition. Keep away from incompatible materials (see section 10).

Storage class Corrosive storage.

7.3 Specific end use(s)

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

Usage description Use only according to directions. Replace and tighten cap after use.

Section 8: Exposure controls/Personal protection

8.1 Control parameters

Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
propan-2-ol	OEL	200 ppm		400 ppm		
propan-2-ol	WEL	400 ppm	999 mg/m³	500 ppm	1250 mg/m³	
potassium hydroxide	OEL				2 mg/m³	
potassium hydroxide	WEL				2 mg/m³	
sodium hydroxide	OEL				2 mg/m³	
sodium hydroxide	WEL				2 mg/m³	
Bornan-2-one	OEL	2 ppm	12 mg/m³	3 ppm	18 mg/m³	
Bornan-2-one	WEL	2 ppm	13 mg/m³	3 ppm	19 mg/m³	

Ingredient comments Ireland, Occupational Exposure Limits 2021.
WEL - Workplace Exposure Limits - EH40/2005 Workplace exposure limits.

8.2 Exposure Controls

Protective equipment

Engineering measures Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment Where risk assessment shows air-purifying respirators are appropriate a full face respirator conforming to EN143 should be used, and suitable respirator cartridges as a backup to

	engineering controls. If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/145/143/149. The specific respirator selected must be based on contamination levels found in the work place. Recommended: Respirator with combination filter for vapour/particulate (EN 141). Use type ABEK (EN 14387) respirator cartridges. Consult manufacturer for specific advice.
Hand protection	Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374) is recommended. (EU Directive 89/686/EEC). Gloves must be inspected prior to use. Suggested material: Neoprene. Breakthrough time: >480 minutes. Minimum layer thickness: 0.7 mm. Consult manufacturer for advice. Selection of the glove material depends on consideration of the penetration times, rates of diffusion and degradation, and concentration specific to the workplace. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.
Eye protection	Wear safety goggles or face shield to prevent any possibility of eye contact. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU).
Other protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handing this product. The selected clothing must satisfy the European norm standard EN 943.
Hygiene measures	Observe normal hygiene standards. Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke. Wash hands after use.
Process conditions	Ensure that eye flushing systems and safety showers are located close by in the work place.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Blue.
Odour	Characteristic.
Odour threshold - lower	No information available as testing has not been completed.
Odour threshold - upper	No information available as testing has not been completed.
pH-Value, Conc. Solution	13
pH-Value, Diluted solution	Not relevant as the product is a concentrated solution.
Melting point	No information available as testing has not been completed.
Initial boiling point and boiling range	No information available as testing has not been completed.
Flash point	Non-Flammable
Evaporation rate	No information available as testing has not been completed.
Flammability state	Not applicable as the product is not flammable.
Flammability limit - lower(%)	Not applicable as the product is not flammable.
Flammability limit - upper(%)	Not applicable as the product is not flammable.
Vapour pressure	No information available as testing has not been completed.
Vapour density (air=1)	No information available as testing has not been completed.
Relative density	1.02 - 1.04 kg/l (at 20°C)
Bulk density	Does not apply, the product is a liquid.
Solubility	Insoluble in water.
Decomposition temperature	No information available as testing has not been completed.
Partition coefficient; n-Octanol/Water	Does not apply, the product is a mixture.

Auto ignition temperature (°C)	Not applicable as the product is not flammable.
Viscosity	No information available as testing has not been completed.
Explosive properties	Not classified as explosive.
Oxidising properties	The product does not meet the criteria to be classified as oxidising.

9.2 Other information

Molecular weight	Does not apply, the product is a mixture.
Volatile organic compound	No information available as testing has not been completed.
Other information	None noted.

Section 10: Stability and reactivity

10.1 Reactivity

Reactivity	Corrosive to metals. Reactions may occur with strong acids and strong oxidizing agents.

10.2 Chemical stability

Stability	Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions

Hazardous reactions	For information on hazardous reaction see section 10.1.
Hazardous polymerisation	Unknown
Polymerisation description	Unknown.

10.4 Conditions to Avoid

Conditions to avoid	Heat, sparks, open flames, temperature extremes and direct sunlight.

10.5 Incompatible materials

Materials to avoid	Avoid oxidising agents. Do not mix with other chemicals unless listed on directions. Avoid contact with metals. Strong acids.

10.6 Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Section 11: Toxicological information

11.1 Information on hazard classses as defined in Regulation (EC) No. 1272/2008

Toxicological information	No toxicological information for the overall finished product.
Acute toxicity (Oral LD50)	No information available as testing has not been completed.
Acute toxicity (Dermal LD50)	No information available as testing has not been completed.
Acute toxicity (Inhalation LD50)	No information available as testing has not been completed.
Serious eye damage/irritation	Causes severe eye damage.
Skin corrosion/irritation	The product is classified as a skin corrosion/irritation hazard.
Respiratory sensitisation	The product is not classified as a respiratory hazard.
Skin sensitisation	The product is not classified as a skin sensitisation hazard.
Germ cell mutagenicity	The product is not classified as a mutagen.
Carcinogenicity	The product is not classified as a carcinogen hazard.

Specific target organ toxicity - Single exposure:
STOT - Single exposure The product is not classified as a single exposure specific target organ toxin.
Specific target organ toxicity - Repeated exposure:
STOT - Repeated exposure The product is not classified as a repeat exposure specific target organ toxin.

Inhalation Inhalation of mist or vapor may cause respiratory tract irritation.
Ingestion May cause chemical burns in mouth and throat. May cause severe internal injury.
Skin contact Corrosive. Cause severe skin burns.
Eye contact Corrosive to eyes. Causes severe eye damage.
Waste management When handling waste, consideration should be made to the safety precautions applying to handling of the product.

Routes of entry Eyes, skin, ingestion or inhalation.
Target organs Eyes, skin, digestive system, respiratory system.

Aspiration hazards: The product is not classified as an aspiration hazard.
Reproductive toxicity: The product is not classified as a reproductive hazard.

Name	LD50 oral	LD50 dermal	LD50 inhalation
potassium hydroxide	333.00mg/kg Rat		
2,2'-(octadec-9-enylimino)bisethanol	>300.00mg/kg Rat		

11.2 Information on other hazards

Information on other hazards None known.

Section 12: Ecological information

12.1 Toxicity

Acute toxicity - Fish No information available as testing has not been completed.
Acute toxicity - Aquatic invertebrates No information available as testing has not been completed.
Acute toxicity - Aquatic plants No information available as testing has not been completed.
Acute toxicity - Microorganisms No information available as testing has not been completed.
Chronic toxicity - Fish No information available as testing has not been completed.
Chronic toxicity - Aquatic invertebrates No information available as testing has not been completed.

Chronic toxicity - Aquatic plants No information available as testing has not been completed.
Chronic toxicity - Microorganisms No information available as testing has not been completed.
Ecotoxicity The product contains a substance which is harmful to aquatic life with long lasting effects.
Eco toxilogical information The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

12.2 Persistence and degradability

Degradability The degradability of the product has not been stated.
Biological oxygen demand No information available as testing has not been completed.
Chemical oxygen demand No information available as testing has not been completed.

12.3 Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.
Bioaccumulation factor No information available as testing has not been completed.
Partition coefficient; n-Octanol/Water Does not apply, the product is a mixture.

12.4 Mobility in soil

Mobility Insoluble in water.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment The product does not contain any PBT or vPvB substances.

12.6 Endocrine disrupting properties

Endocrine disrupting properties The product does not contain any substances with endocrine disrupting properties at a concentration above or equal to 0.1%.

12.7 Other adverse effects

Other adverse effects None known.

Name	Acute toxicity (Fish)	Acute toxicity (Aquatic invertebrates)	Acute toxicity (Aquatic plants)
Dodecyldimethylamine oxide	LC50 96 Hours 31.80ppm Brachydanio rerio (Zebra Fish)	EC50 48 Hours >3.90ppm Daphnia magna	
2,2'-(octadec-9-enylimino)bisethanol	LC50 96 Hours >0.10mg/l Brachydanio rerio (Zebra Fish)	EC50 48 Hours >0.01mg/l Daphnia magna	EC50 72 Hours >0.01mg/l Selenastrum Capricornutum

Section 13: Disposal considerations

Waste management When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1 Waste treatment methods

Disposal methods Dispose of waste and residues in accordance with local authority requirements. For waste disposal, use a licensed industrial waste disposal agent.

Section 14: Transport information

14.1 UN number or ID number

UN no. (ADR) UN1760
UN no. (IMDG) UN1760
UN no. (IATA) UN1760

14.2 UN proper shipping name

ADR proper shipping name CORROSIVE LIQUID, N.O.S. (Didecyldimethylammonium chloride + potassium hydroxide)
IMDG proper shipping name CORROSIVE LIQUID, N.O.S. (Didecyldimethylammonium chloride + potassium hydroxide)
IATA proper shipping name CORROSIVE LIQUID N.O.S. (Didecyldimethylammonium chloride + potassium hydroxide)

14.3 Transport hazard class(es)

ADR class 8
IMDG class 8
IATA class 8

Transport labels

14.4 Packing group

ADR/RID/ADN packing group III
IMDG packing group III
IATA packing group III

14.5 Environmental hazards

ADR No
IMDG No
IATA No

14.6 Special precautions for user

EMS F-A, S-B
Emergency action code A3 A803

Hazard no. (ADR)	80
Tunnel restriction code	(E)

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Section 15: Regulatory information

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

EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. The UN Globally Harmonized System (GHS) Safety Data Sheet format (Annex IV) is implemented as Annex II of REACH EU No 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). REACH etc. (Amendment etc.) (EU Exit) Regulations 2020. Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019.
Approved code of practice	Workplace Exposure Limits Guidance Note EH40/2005. 2021 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2021) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)

15.2 Chemical safety assessment

Chemical safety assessment	No chemical safety assessment has been carried out.

Section 16: Other information

General information	This Safety Data Sheet is in accordance with REACH Annex II, (EC) No 2020/878. Workplace Exposure Limits Guidance Note EH40/2005. (Fourth Edition 2020)
Revision comments	This is a first issue.
Revision date	16 December 2022
Revision	1
Safety data sheet status	Approved.

Hazard statements in full

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H336	May cause drowsiness or dizziness.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H290	May be corrosive to metals.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
H228	Flammable solid.
H332	Harmful if inhaled.
H371	May cause damage to organs .
H413	May cause long lasting harmful effects to aquatic life.
H361	Suspected of damaging fertility or the unborn child .

Disclaimer

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.