

Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

DEEP CLEAN 1.1 Product identifier: Substance type: **CLP Mixture**

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

Use of the Substance/Mixture : CLEANER AND DEGREASER

Recommended restrictions on use : Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet:

COMPANY IDENTIFICATION Ecolab Ltd.

LOCAL COMPANY IDENTIFICATION

Ecolab Ltd.

PO Box 11; Winnington Avenue

PO Box 11; Winnington Avenue Northwich, Cheshire,, CW8 4DX, United Kingdom Northwich, Cheshire,, CW8 4DX, United Kingdom

> TEL: + 44 (0)1606 74488 TEL: + 44 (0)1606 74488

For Product Safety information please contact: msdseame@nalco.com

1.4 Emergency telephone number:

Emergency telephone number Trans-European

+441618841235

+32-(0)3-575-5555 Trans-European Address European

Economic Area HQ

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Section: 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin corrosion, Category 1 H314 Serious eye damage, Category 1 H318 Chronic aquatic toxicity, Category 3 H412

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

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:

> P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face

protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off

immediately all contaminated clothing.

Rinse skin with water.

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/doctor.

Hazardous components which must be listed on the label: Amines, C12-14 alkyldimethyl, N-oxides

2.3 Other hazards

None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. REACH No.	Classification (REGULATION (EC) No 1272/2008)	Concentration: [%]
Amines, C12-14 alkyldimethyl, N-oxides	308062-28-4 01-2119490061-47- 0000	Acute toxicity Category 4; H302 Skin irritation Category 2; H315 Serious eye damage Category 1; H318 Acute aquatic toxicity Category 1; H400 Chronic aquatic toxicity Category 2; H411	1 - < 2.5
2,2'-(octadec-9- enylimino)bisethanol	25307-17-9 246-807-3 01-2119510876-35	Acute toxicity Category 4; H302 Skin corrosion Category 1B; H314 Serious eye damage Category 1; H318 Acute aquatic toxicity Category 1; H400 Chronic aquatic toxicity Category 1; H410	1 - < 2.5
Didecyl-Dimethyl-Ammonium chloride	7173-51-5 230-525-2 01-2119945987-15	Acute toxicity Category 4; H302 Skin corrosion Category 1B; H314 Chronic aquatic toxicity Category 2; H411 Acute aquatic toxicity Category 1; H400	0.5 - < 1
Substances with a workplace	exposure limit :		
Potassium Hydroxide	1310-58-3 215-181-3 01-2119487136-33	Acute toxicity Category 4; H302 Skin corrosion Category 1A; H314 Corrosive to metals Category 1; H290	0.25 - < 0.5
Isopropanol	67-63-0 200-661-7 01-2119457558-25	Flammable liquids Category 2; H225 Eye irritation Category 2; H319 Specific target organ toxicity - single exposure Category 3; H336	0.1 - < 0.25

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section: 4. FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled : Remove to fresh air.

Treat symptomatically.

Get medical attention if symptoms occur.

In case of skin contact : Wash off immediately with plenty of water for at least 15

minutes.

Use a mild soap if available. Wash clothing before reuse.

Thoroughly clean shoes before reuse. Get medical attention immediately.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue

rinsing.

Get medical attention immediately.

If swallowed : Rinse mouth with water.

Do NOT induce vomiting.

Never give anything by mouth to an unconscious person.

If conscious, give 2 glasses of water. Get medical attention immediately.

Protection of first-aiders : In event of emergency assess the danger before taking action.

Do not put yourself at risk of injury. If in doubt, contact

emergency responders. Use personal protective equipment as

required.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

Section: 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Unsuitable extinguishing

media

: None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: Not flammable or combustible.

Hazardous combustion

products

: Depending on combustion properties, decomposition products

may include following materials:

Carbon oxides

nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus

5.3 Advice for firefighters

Special protective equipment : Use personal protective equipment.

for firefighters

Further information : Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations. In the

event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency

personnel

: Ensure adequate ventilation.

Keep people away from and upwind of spill/leak.

Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure

limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Advice for emergency

responders

: If specialised clothing is required to deal with the spillage, take

note of any information in Section 8 on suitable and unsuitable

materials.

6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Stop leak if safe to do so.

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

local / national regulations (see section 13).

Flush away traces with water.

For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

6.4 Reference to other sections

See Section 1 for emergency contact information.

For personal protection see section 8.

See Section 13 for additional waste treatment information.

Section: 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling : Do not ingest. Do not breathe spray, vapour. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after

handling. Use only with adequate ventilation.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. Remove and wash contaminated clothing before reuse. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash

hazard.

7.2 Conditions for safe storage, including any incompatibilities

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

DEEP CLEAN

Requirements for storage

areas and containers

: Do not store near acids. Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.

Suitable material : Keep in properly labelled containers.

Unsuitable material

not determined

7.3 Specific end uses

Specific use(s) : CLEANER AND DEGREASER

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Potassium Hydroxide	1310-58-3	STEL	2 mg/m3	UKCOSSTD
Isopropanol	67-63-0	TWA	400 ppm 999 mg/m3	UKCOSSTD
		STEL	500 ppm 1,250 mg/m3	UKCOSSTD

DNEL

DINLL	
Potassium Hydroxide	: End Use: Workers Exposure routes: Inhalation Value: 1 mg/m3
	End Use: Consumers Exposure routes: Inhalation Value: 1 mg/m3
Isopropanol	: End Use: Workers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 888 mg/cm2
	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 500 mg/m3
	End Use: Consumers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 319 mg/cm2
	End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 89 mg/m3
	End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term systemic effects Value: 26 ppm

PNEC

Isopropanol	: Fresh water Value: 140.9 mg/l
	Marine water Value: 140.9 mg/l
	Intermittent use/release
	Value: 140.9 mg/l
	Fresh water Value: 552 mg/kg
	Marine sediment Value: 552 mg/kg
	Soil Value: 28 mg/kg
	Sewage treatment plant Value: 2251 mg/l
	Oral Value: 160 mg/kg

8.2 Exposure controls

Appropriate engineering controls

Effective exhaust ventilation system.

Maintain air concentrations below occupational exposure standards.

Individual protection measures

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice.Remove and wash contaminated clothing before reuse.Wash face, hands and any exposed skin thoroughly after handling.Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash

hazard.

Eye/face protection (EN

166)

: Safety goggles Face-shield

Hand protection (EN 374) : Recommended preventive skin protection

Gloves Nitrile rubber butyl-rubber

Breakthrough time: 1 – 4 hours

Minimum thickness for butyl-rubber 0.7 mm for nitrile rubber

0.4 mm or equivalent (please refer to the gloves

manufacturer/distributor for advise).

Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin and body protection

(EN 14605)

: Personal protective equipment comprising: suitable protective

gloves, safety goggles and protective clothing including

appropriate safety shoes

Respiratory protection (EN

143, 14387)

: When respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by

measures, methods or procedures of work organization, consider the use of certified respiratory protection equipment meeting EU requirements (89/656/EEC, (EU) 2016/425), or equivalent, with filter type:A-P

Environmental exposure controls

General advice : Consider the provision of containment around storage

vessels.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : clear, pale Odour characteristic Flash point : > 100 °C

pΗ : 13, 100 %

(20 °C)

Odour Threshold : no data available Melting point/freezing point : no data available Initial boiling point and boiling

range

: no data available

Evaporation rate : no data available Flammability (solid, gas) : no data available Upper explosion limit : no data available Lower explosion limit : no data available Vapour pressure : no data available Relative vapour density : no data available

Relative density : 1.01 - 1.03

Solubility(ies)

Water solubility : soluble in cold water, soluble in hot water

Solubility in other solvents : no data available Partition coefficient: n-: no data available

octanol/water

: no data available Auto-ignition temperature Thermal decomposition : no data available Viscosity, dynamic : no data available Viscosity, kinematic : no data available

Explosive properties : no data available Oxidizing properties : no data available

9.2 Other information

no data available

Section: 10. STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : Strong acids

10.6 Hazardous decomposition products

Hazardous decomposition

products

: Depending on combustion properties, decomposition products

may include following materials:

Carbon oxides

nitrogen oxides (NOx)

Sulphur oxides

Oxides of phosphorus

Section: 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

exposure

Information on likely routes of : Inhalation, Eye contact, Skin contact

Toxicity

Product

Acute oral toxicity : Acute toxicity estimate : > 2,000 mg/kg

Acute inhalation toxicity : There is no data available for this product. Acute dermal toxicity : There is no data available for this product.

Skin corrosion/irritation : There is no data available for this product.

Serious eye damage/eye

irritation

: There is no data available for this product.

Respiratory or skin

sensitization

: There is no data available for this product.

Carcinogenicity : There is no data available for this product.

Reproductive effects : There is no data available for this product.

Germ cell mutagenicity : There is no data available for this product.

Teratogenicity : There is no data available for this product.

STOT - single exposure : There is no data available for this product.

STOT - repeated exposure : There is no data available for this product.

Aspiration toxicity : There is no data available for this product.

Components

Acute oral toxicity : Amines, C12-14 alkyldimethyl, N-oxides

LD50 rat: 1,064 mg/kg

2,2'-(octadec-9-enylimino)bisethanol

LD50 rat: 1,260 mg/kg

Didecyl-Dimethyl-Ammonium chloride

LD50 rat: 329 mg/kg

Potassium Hydroxide LD50 rat: 333 mg/kg

Isopropanol

LD50 rat: 5,840 mg/kg

Components

Acute inhalation toxicity : Isopropanol

LC50 rat: > 30 mg/l Exposure time: 4 h Test atmosphere: vapour

Components

Acute dermal toxicity : Didecyl-Dimethyl-Ammonium chloride

LD50 rabbit: 2,930 mg/kg

Isopropanol

LD50 rabbit: 12,870 mg/kg

Potential Health Effects

Eyes : Causes serious eye damage.

Skin : Causes severe skin burns.

Ingestion : Causes digestive tract burns.

Inhalation : May cause nose, throat, and lung irritation.

Chronic Exposure : Health injuries are not known or expected under normal

use.

Experience with human exposure

Eye contact : Redness, Pain, Corrosion

Skin contact : Redness, Pain, Corrosion

Ingestion : Corrosion, Abdominal pain

Inhalation : Respiratory irritation, Cough

Further information : no data available

Section: 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Product

Environmental Effects : Harmful to aquatic life with long lasting effects.

Toxicity to fish : no data available

Toxicity to daphnia and other

aquatic invertebrates

: no data available

Toxicity to algae : no data available

Components

Toxicity to fish : Amines, C12-14 alkyldimethyl, N-oxides

LC50: 2.67 mg/l

2,2'-(octadec-9-enylimino)bisethanol 96 h LC50 Danio rerio (zebra fish): 0.1 mg/l

Didecyl-Dimethyl-Ammonium chloride

96 h LC50 Fish: 1 mg/l

Isopropanol

96 h LC50 Pimephales promelas (fathead minnow):

9,640 mg/l

Components

Toxicity to daphnia and other

aquatic invertebrates

: Amines, C12-14 alkyldimethyl, N-oxides EC50 Daphnia magna (Water flea): 3.1 mg/l

2,2'-(octadec-9-enylimino)bisethanol

48 h EC50 Daphnia magna (Water flea): 0.043 mg/l

Isopropanol

LC50 Daphnia magna (Water flea): > 10,000 mg/l

Components

Toxicity to algae : Amines, C12-14 alkyldimethyl, N-oxides

LC50: 0.143 mg/l NOEC: 0.067 mg/l

2,2'-(octadec-9-enylimino)bisethanol72 h EC50 Pseudokirchneriella subcapitata

(microalgae): 0.0538 mg/l

Components

Toxicity to bacteria : Isopropanol

1,050 mg/l

Components

Toxicity to daphnia and other aquatic invertebrates (Chronic

toxicity)

: 2,2'-(octadec-9-enylimino)bisethanol

21 d EC50: 0.0463 mg/l

12.2 Persistence and degradability

Product

no data available

Components

Biodegradability : Amines, C12-14 alkyldimethyl, N-oxides

Result: Readily biodegradable.

2,2'-(octadec-9-enylimino)bisethanol Result: Readily biodegradable.

Didecyl-Dimethyl-Ammonium chloride Result: Eliminated from aquatic environment

Potassium Hydroxide

Result: Not applicable - inorganic

Isopropanol

Result: Readily biodegradable.

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

Product

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

12.6 Other adverse effects

no data available

Section: 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water

courses or the soil.

Where possible recycling is preferred to disposal or

incineration.

If recycling is not practicable, dispose of in compliance with

local regulations.

Dispose of wastes in an approved waste disposal facility.

Contaminated packaging : Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

Guidance for Waste Code

selection

: Organic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator

to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable European (EU Directive 2008/98/EC) and local

regulations.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (ADR/ADN/RID)

14.1 UN number: Not applicable.

14.2 UN proper shipping name: PRODUCT IS NOT REGULATED DURING

TRANSPORTATION

14.3 Transport hazard class(es):Not applicable. **14.4 Packing group:**Not applicable.

14.5 Environmental hazards: No

14.6 Special precautions for user: Not applicable.

Air transport (IATA)

14.1 UN number: Not applicable.

14.2 UN proper shipping name: PRODUCT IS NOT REGULATED DURING

TRANSPORTATION

14.3 Transport hazard class(es):Not applicable. **14.4 Packing group:**Not applicable.

14.5 Environmental hazards: No

14.6 Special precautions for user: Not applicable.

Sea transport (IMDG/IMO)

14.1 UN number: Not applicable.

14.2 UN proper shipping name: PRODUCT IS NOT REGULATED DURING

TRANSPORTATION

14.3 Transport hazard class(es):Not applicable. **14.4 Packing group:**Not applicable.

14.5 Environmental hazards: No

14.6 Special precautions for user:
Not applicable.
Not applicable.

Annex II of MARPOL 73/78 and the IBC Code:

Section: 15. REGULATORY INFORMATION

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

INTERNATIONAL CHEMICAL CONTROL LAWS

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out on the product.

Section: 16. OTHER INFORMATION

Procedure used to derive the classification according to REGULATION (EC) No 1272/2008

Classification	Justification
Skin corrosion 1, H314	Based on product data or assessment
Serious eye damage 1, H318	Based on product data or assessment
Chronic aquatic toxicity 3, H412	Calculation method

Full text of H-Statements

H225	Highly flammable liquid and vapour.
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.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road: AICS - Australian Inventory of Chemical Substances: ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number – European Community number; ECx – Concentration associated with x% response; ELx – Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS -Globally Harmonized System; GLP – Good Laboratory Practice; IARC – International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China: IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 – Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL – International Convention for the Prevention of Pollution from Ships; n.o.s. – Not Otherwise Specified; NO(A)EC – No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention;

PBT – Persistent, Bioaccumulative and Toxic substance; PICCS – Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR – (Quantitative) Structure Activity Relationship; REACH – Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID – Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT – Self-Accelerating Decomposition Temperature; SDS – Safety Data Sheet; TCSI – Taiwan Chemical Substance Inventory; TRGS – Technical Rule for Hazardous Substances; TSCA – Toxic Substances Control Act (United States); UN – United Nations; vPvB – Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Safety Data Sheet

: IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, Geneva: World Health Organization, International Agency for Research on Cancer.

The possible key literature references and data sources which may have been used in conjunction with the consideration of expert judgment to compile this Safety Data Sheet: European regulations/directives (including (EC) No. 1907/2006, (EC) No. 1272/2008), supplier data, inter-net, ESIS, IUCLID, ERIcards, Non European official regulatory data and other data sources.

Prepared By : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.