

APEX ULTRA**Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Product name : APEX ULTRA
Product code : 114974E
Use of the Substance/Mixture : Machine Warewashing Detergent
Substance type: : Mixture

For professional users only.

Product dilution information : 0.1 % - 0.25 %

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

Identified uses : Dishwash and rinse aid product; Automatic process
Recommended restrictions on use : Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Company : Ecolab Ltd.
PO Box 11; Winnington Avenue
Northwich, Cheshire, United Kingdom CW8 4DX
+ 44 (0)1606 74488
ccs@ecolab.com

1.4 Emergency telephone number

Emergency telephone number : Food & Beverage, Institutional, Agriculture, Textile Hygiene:
Northwich: +44 (0)1606 74488
Healthcare:
Leeds: +44 (0)113 232 2480
Swansea: +44 (0)1252 717616

Poison Information Centre telephone number : Not Available

Date of Compilation/Revision : 20.02.2014
Version : 1.1

Section: 2. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)****Product AS SOLD**

Eye irritation , Category 2 H319
Chronic aquatic toxicity , Category 2 H411

Product AT USE DILUTION

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Not a hazardous substance or mixture.

Classification (67/548/EEC, 1999/45/EC)

Product AS SOLD

Xi ; IRRITANT

R36

N ; DANGEROUS FOR THE ENVIRONMENT

R51/53

Product AT USE DILUTION

The product does not need to be labelled in accordance with EC directives or respective national laws.

For the full text of the R-phrases mentioned in this Section, see Section 16.

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

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Product AS SOLD

Hazard pictograms



Signal Word

: Warning

Hazard Statements

: H319
H411

Causes serious eye irritation.

Toxic to aquatic life with long lasting effects.

Precautionary Statements

: **Prevention:**
P273

Avoid release to the environment.

Product AT USE DILUTION

Not a hazardous substance or mixture.

2.3 Other hazards

Product AS SOLD

None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Product AS SOLD

Hazardous components

Chemical Name	CAS-No. EC-No. REACH No.	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration: [%]
Sodium Carbonate(soda)	497-19-8 207-838-8	Xi; R36	Eye irritationCategory 2; H319	>= 30 - < 50
phosphonic acid, (1-	67953-76-8	Xi; R36	Acute toxicityCategory 4;	>= 5 - < 10

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hydroxyethylidene)bis-, potassium salt	267-956-0		H302 Serious eye damage/eye irritation Category 2; H319	
troclosene sodium, dihydrate	51580-86-0 220-767-7	E-N-O-Xi-Xn; R02-R22- R31-R36/37- R50-R08	Acute toxicity Category 4; H302 Eye irritation Category 2; H319 Specific target organ toxicity - single exposure Category 3; H335 Acute aquatic toxicity Category 1; H400 Chronic aquatic toxicity Category 1; H410	>= 3 - < 5
alcohols, c12-14, ethoxylated propoxylated	68439-51-0	Xi; R41-R38	Skin irritation Category 2; H315 Serious eye damage/eye irritation Category 1; H318	>= 2.5 - < 3

Product AT USE DILUTION

Remarks : No hazardous ingredients

For the full text of the R-phrases mentioned in this Section, see Section 16.
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

Product AS SOLD

- 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.
- In case of skin contact : Rinse with plenty of water.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Get medical attention if symptoms occur.

Product AT USE DILUTION

- In case of eye contact : Rinse with plenty of water.
- In case of skin contact : Rinse with plenty of water.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Get medical attention if symptoms occur.

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.

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Section: 5. FIREFIGHTING MEASURES

Product AS SOLD

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 : Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus metal oxides

5.3 Advice for firefighters

Special protective equipment for firefighters : Use personal protective equipment

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. 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

Product AS SOLD

Advice for non-emergency personnel : 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.

Product AT USE DILUTION

Advice for non-emergency personnel : 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

Product AS SOLD

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

Product AT USE DILUTION

Environmental precautions : No special environmental precautions required.

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6.3 Methods and materials for containment and cleaning up

Product AS SOLD

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.

Product AT USE DILUTION

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

Product AS SOLD

Advice on safe handling : Avoid contact with skin and eyes. Do not ingest. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands thoroughly after handling. Use only with adequate ventilation. Mixing this product with acid or ammonia releases chlorine gas.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

Product AT USE DILUTION

Advice on safe handling : For personal protection see section 8. Wash hands after handling.

Hygiene measures : Wash hands before breaks and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Product AS SOLD

Requirements for storage areas and containers : Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : 0 °C to 50 °C

Product AT USE DILUTION

Requirements for storage areas and containers : Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

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7.3 Specific end uses

Product AS SOLD

Specific use(s) : Dishwash and rinse aid product; Automatic process

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Product AS SOLD

Occupational Exposure Limits

CAS-No.	Components	Value type (Form of exposure)	Control parameters	Update	Basis
7782-50-5	chlorine	STEL	0.5 ppm 1.5 mg/m ³	2007-08-01	UKCOSSTD

8.2 Exposure controls

Product AS SOLD

Appropriate engineering controls

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

Eye/face protection (EN 166) : No special protective equipment required.

Hand protection (EN 374) : No special protective equipment required.

Skin and body protection (EN 14605) : No special protective equipment required.

Respiratory protection (EN 143, 14387) : No personal respiratory protective equipment normally required.

Product AT USE DILUTION

Appropriate engineering controls

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands before breaks and immediately after handling the product.

Eye/face protection (EN 166) : No special protective equipment required.

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Hand protection (EN 374)	: No special protective equipment required.
Skin and body protection (EN 14605)	: No special protective equipment required.
Respiratory protection (EN 143, 14387)	: No personal respiratory protective equipment normally required.

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

	Product AS SOLD	Product AT USE DILUTION
Appearance	: solid	liquid
Colour	: white	Colourless
Odour	: Chlorine	Chlorine
pH	: 10.85, 1 %	10.9 - 11.0
Flash point	: Not applicable.	
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	: 3.2 - 3.6	
Water solubility	: soluble	
Solubility in other solvents	: no data available	
Partition coefficient: n-octanol/water	: no data available	
Auto-ignition temperature	: no data available	
Thermal decomposition	: no data available	
Viscosity, kinematic	: no data available	
Explosive properties	: no data available	
Oxidizing properties	: Yes	

9.2 Other information

no data available

Section: 10. STABILITY AND REACTIVITY

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Product AS SOLD

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

Mixing this product with acid or ammonia releases chlorine gas.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Acids
Bases

10.6 Hazardous decomposition products

Carbon oxides
nitrogen oxides (NO_x)
Sulphur oxides
Oxides of phosphorus
metal oxides

Section: 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product AS SOLD

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

Toxicity

- Acute oral toxicity : Acute toxicity estimate : > 2,000 mg/kg
- Acute inhalation toxicity : 4 h Acute toxicity estimate : > 5 mg/l
- Acute dermal toxicity : Based on available data, the classification criteria are not met.
- Skin corrosion/irritation : Based on available data, the classification criteria are not met.
- Serious eye damage/eye irritation : Based on available data, the classification criteria are not met.
- Respiratory or skin sensitization : Based on available data, the classification criteria are not met.
- Carcinogenicity : Based on available data, the classification criteria are not met.

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- Reproductive effects : Based on available data, the classification criteria are not met.
- Germ cell mutagenicity : Based on available data, the classification criteria are not met.
- Teratogenicity : Based on available data, the classification criteria are not met.
- STOT - single exposure : Based on available data, the classification criteria are not met.
- STOT - repeated exposure : Based on available data, the classification criteria are not met.
- Aspiration toxicity : Based on available data, the classification criteria are not met.

Components

- Acute oral toxicity : Sodium Carbonate(soda)
LD50 rat: 2,800 mg/kg
- phosphonic acid, (1-hydroxyethylidene)bis-, potassium salt
LD50 rat: 940 mg/kg
- troclosene sodium, dihydrate
LD50 rat: 1,823 mg/kg
- alcohols, c12-14, ethoxylated propoxylated
LD50 rat: > 2,000 mg/kg
- Acute inhalation toxicity : Sodium Carbonate(soda)
4 h LC50 rat: 1.15 mg/l
- Acute dermal toxicity : troclosene sodium, dihydrate
LD50 rat: > 5,000 mg/kg
- alcohols, c12-14, ethoxylated propoxylated
LD50 rabbit: 2,290 mg/kg

Potential Health Effects

Product AS SOLD

- Eyes : Causes serious eye irritation.
- Skin : Health injuries are not known or expected under normal use.
- Ingestion : Health injuries are not known or expected under normal use.
- Inhalation : Health injuries are not known or expected under normal use.
- Chronic Exposure : Health injuries are not known or expected under normal use.

Product AT USE DILUTION

- Eyes : Health injuries are not known or expected under normal use.
- Skin : Health injuries are not known or expected under normal use.
- Ingestion : Health injuries are not known or expected under normal use.
- Inhalation : Health injuries are not known or expected under normal use.
- Chronic Exposure : Health injuries are not known or expected under normal use.

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Experience with human exposure

Product AS SOLD

Eye contact : Redness, Pain, Irritation

Skin contact : Redness, Irritation

Ingestion : No symptoms known or expected

Inhalation : No information available.

Product AT USE DILUTION

Eye contact : No symptoms known or expected

Skin contact : No symptoms known or expected

Ingestion : No symptoms known or expected

Inhalation : No symptoms known or expected

Section: 12. ECOLOGICAL INFORMATION

Product AS SOLD

12.1 Ecotoxicity

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

Product

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 : alcohols, c12-14, ethoxylated propoxylated
96 h LC50 Fish : > 1 mg/l

Components

Toxicity to daphnia and other aquatic invertebrates. : Sodium Carbonate(soda)
48 h EC50 Daphnia: 200 mg/l

troclosene sodium, dihydrate
48 h EC50 Daphnia: 0.196 mg/l

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

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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 AS SOLD

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.

European Waste Catalogue : 200115* - alkalines

Product AT USE DILUTION

Product : 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.

Section: 14. TRANSPORT INFORMATION

Product AS SOLD

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 : 3077
14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (troclosene sodium, dihydrate, alcohol ethoxylate)
14.3 Transport hazard class(es) : 9

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14.4 Packing group : III
14.5 Environmental hazards : No
14.6 Special precautions for user : None

Air transport (IATA)

14.1 UN number : 3077
14.2 UN proper shipping name : Environmentally hazardous substance, solid, n.o.s.
(troclosene sodium, dihydrate, alcohol ethoxylate)
14.3 Transport hazard class(es) : 9
14.4 Packing group : III
14.5 Environmental hazards : No
14.6 Special precautions for user : None

Sea Transport (IMDG/IMO)

14.1 UN number : 3077
14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(troclosene sodium, dihydrate, alcohol ethoxylate)
14.3 Transport hazard class(es) : 9
14.4 Packing group : III
14.5 Environmental hazards : Yes
14.6 Special precautions for user : None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable.

Product AT USE DILUTION

Not intended for transport.

Section: 15. REGULATORY INFORMATION

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

according to Detergents Regulation EC 648/2004 : 15 % or over but less than 30 %: Phosphates
5 % or over but less than 15 %: Phosphonates
less than 5 %: Non-ionic surfactants, Chlorine-based bleaching agents

National Regulations

Take note of Dir 94/33/EC on the protection of young people at work.

Other regulations : The Chemicals (Hazard Information and Packaging for Supply) Regulations.
The Control of Substances Hazardous to Health Regulations.
Health and Safety at Work Act.

15.2 Chemical Safety Assessment

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This product contains substances for which Chemical Safety Assessments are still required.

Section: 16. OTHER INFORMATION

Full text of R-Phrases

R02	Risk of explosion by shock, friction, fire or other sources of ignition.
R08	Contact with combustible material may cause fire.
R22	Harmful if swallowed.
R31	Contact with acids liberates toxic gas.
R36	Irritating to eyes.
R36/37	Irritating to eyes and respiratory system.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R50	Very toxic to aquatic organisms.

Full text of H-Statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

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.

ANNEX: EXPOSURE SCENARIOS

DPD+ Substances:

The following substances are the lead substances that contribute to the mixture Exposure Scenario according to the DPD+ Rule:

Route	Substance	CAS-No.	EINECS-No.
Ingestion	troclosene sodium, dihydrate	51580-86-0	220-767-7
Inhalation	troclosene sodium, dihydrate	51580-86-0	220-767-7
Dermal	alcohols, c12-14, ethoxylated propoxylated	68439-51-0	
Eyes	Sodium Carbonate(soda)	497-19-8	207-838-8

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aquatic environment	troclosene sodium, dihydrate	51580-86-0	220-767-7
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To calculate if your downstream Operating Conditions and Risk management Measures are safe, please calculate your risk factor at the website below:

www.ecetoc.org/tra

Short title of Exposure Scenario : **Dishwash and rinse aid product; Automatic process**

Use descriptors

- Main User Groups : Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
 - Sectors of end-use : **SU22:** Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
 - Process categories : **PROC2:** Use in closed, continuous process with occasional controlled exposure
PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities
 - Product categories : **PC35:** Washing and cleaning products (including solvent based products)
 - Environmental Release Categories : **ERC8a:** Wide dispersive indoor use of processing aids in open systems
-