

AUTOMATIC DISHWASH

FEATURES & APPLICATIONS:

Unico Automatic Dishwash is a machine dishwashing liquid. It has been formulated to work along with Unico Automatic Rinse Aid in all types of commercial dishwashing machines, leaving glasses, crockery, pots, pans and cutlery clean, sparkling and streak free. Automatic Dishwash has been formulated to remove food residue and is suitable for use in both hard-water and soft water areas. It is suitable for use with Aluminium as it does not contain Sodium Hydroxide. It is perfume free and therefore will not taint surfaces.

APPLICATION DETAILS

Task	Maximum Dilution	How To Use
Automatic Dishwashing Light to medium soiling.	1 in 3333 with water (1.5ml per 5 litres) (soft water areas)	For metered machines, place inlet tube in container then set meter to the lowest level which gives satisfactory cleaning.
Heavy soiling.	1 in 1666 with water (3.0ml per 5 litres) (hard water areas)	

PRODUCT AND PACKAGING INFORMATION

Appearance & Odour:	Yellow liquid with slight odour.
Chemical Description:	An aqueous solution of surfactants, preservative and dye.
Packaging:	2 X 5 litres, 20 litres.
Shelf Life:	2 Years.

ENVIRONMENTAL INFORMATION

General Information: This product has been formulated to have very little ecological impact.

Environmental Checklist:

Biodegradable detergents	Yes	CFC free	Yes	Solvent free	Yes
Phosphate free	No	Acid/alkali free	No	Free of dyes/perfumes	No
Recyclable packaging	Yes	Biodegradable container	No	Biodegradable outer box	Yes

FURTHER INFORMATION AVAILABLE ON REQUEST

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Commercial Name Intended/Recommended use	Automatic Dishwash Machine Dishwashing Liquid	Supplier Address	Unico Ltd North Main Street, Carronshore, Falkirk FK2 8HT 01324 573400 01324 573401
Issue Date Issue Number	May'2015 3	Telephone Fax	

2. HAZARDS IDENTIFICATION

2.1 Classification This product has no classification according to Chemicals (Hazard Information Packaging and Supply) Regulations 2002.

This product is classified under EC 1272/2008

Physical and Chemical Hazards	Not classified
Human Health	May be irritating to skin & eyes
Environment	Not classified

2.1 Label Elements Label in Accordance with (EC) No. 1272/2008



Signal Word
Hazard Statements

Warning
H319 Causes serious eye irritation
H315 Causes skin irritation
H335 May cause respiratory irritation

Precautionary Statements

P102 - Keep out of the Reach of Children
P103 – Please read the label information before use.
EUH 210 - Safety data sheet available on request.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P305 +P351 +P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P337 + P313 If eye irritation persists: Get medical attention
P281 Use personal protective equipment as required.
Wear eye piece protection when there is a risk of splashing.
Rubber /impervious Gloves for skin protection. When handling concentrated product

3. COMPOSITION OF PRODUCT AND INFORMATION ON INGREDIENTS

2.1 Mixtures

Concentrations below the concentration limit for classification in mixtures means that substance not reaching this does not need to be classified. Those that do

Tetrasodium Ethylenediamine Tetraacetate		5 – 15%
CAS-No.: 64-02-8	EC No.: 200-573-9	
Classification (EC 1272/2008) Eye Irritant 2 – H319	Single Organ Tox. 3 – H335 Skin Irritant 2 – H315	

<u>NAME</u>	<u>RANGE</u>	<u>EINECS</u>	<u>CAS No</u>	<u>Conc. Limit for Classification</u>
1- Hydroxyethylidene-1,1-Diphosphonic Acid	0.1-1%	220-552-8	2809-21-4	1%
B-Alanine N-(2-carboxyethyl)-N-(2-ethylhexyl)-monosodium salt	0.1-1%	--	94441-92-6	1%
C.I. 19140 Yellow 5	<0.1%	217-699-5	1934-21-0	1%

4. FIRST AID MEASURES

4.1 Description of first aid measures

Ingestion	Rinse mouth thoroughly. Do not induce vomiting. Act immediately to prevent further irritation of mouth, throat and stomach mucosa. Seek medical advice immediately
Inhalation	No ill effects expected at concentrations used. If irritation is experienced go in open air and ventilate area. Mouth and throat may be rinsed with water.
Eye Contact	Check for and remove contact lenses. Rinse thoroughly with plenty of water for several minutes.
Skin Contact	Rinse affected area with water as instructed, if needed apply a cold compress to relieve irritation.

4.2 Most Important symptoms and effects, both acute & chronic

Where irritation of tissue occurs, stinging and redden accompanied by some discomfort for a short period after exposure no further exposure until condition improves. Be vigilant for asthmatic-like symptoms after inhalation. No Chronic effects known at the concentrations used in the mixture

4.3 Indication of any immediate medical attention and special treatment needed

If irritation to the mouth, throat, stomach, skin, eyes or respiratory system occurs and doesn't subside within a few minutes after the first aid measures have been carried out, seek immediate medical advice and have this SDS or the product label to hand. Be vigilant for asthma-like respiratory symptoms. These will require immediate medical assistance.

A cold compress can be used to alleviate skin irritation.

5. FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media	This product is not flammable. Use fire extinguishing media appropriate for surrounding area.
Unsuitable extinguishing media	Not applicable.
5.2 Special hazards arising from the substance or mixture	Fumes may contain poisonous oxides of carbon and nitrogen (CO _x & NO _x) if affected by fire.
5.3 Advice for firefighters	Use appropriate extinguishing media for fires in the area. Firefighters should wear self-contained breathing apparatus if heat generated breakdown products are likely to be present

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing and eyeshields.

6.2 Environmental Precautions

Avoid spillage into surface water drains, soil / subsoil or vegetation.

6.3 Methods and material for containment and cleaning up

Hose away with plenty of water, diluting well, unless this would contaminate a water source or vegetation. In which case either collect, dilute as earlier and pour down waste drain (foul sewer) or absorb onto dry sand or similar material and dispose of safely as commercial waste.

7. HANDLING AND STORAGE

7.1 Handling	Avoid contact with skin and eyes. Do not mix with any other chemicals. Avoid contact with strong acids or alkalis
7.2 Storage	Store upright in original containers in a cool dry area out of the reach of children.
7.3 Specific end use(s)	Use only as directed by the front page of this document and the product label

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

No substance above 1% in the product with a listed exposure limit

8.2 Exposure Control

Respiratory Protection	Personal protection is not normally required unless a risk assessment indicates the need for it .In which case wear a facemask with a suitable particulate filter.
Skin Protection	Personal protection is not normally required unless a risk assessment indicates the need for it .In which case wear protective overalls and safety shoes/boots.
Eye Protection	Wear eyeshields.
Hand Protection	Use of rubber or similar impervious gloves is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance		Yellow Liquid		Flash P
Odour	Slight	Viscosity (20C)	1 cp approx	
pH	9.50 typically	Water Solubility	Soluble	
Boiling Point	Approx. 100 C	Explosive Properties	None	
Oxidising Properties	None	Vapour Pressure	Not Applicable	Relativ
Fat Solubility		-		

10. STABILITY AND REACTIVITY

10.1 Reactivity	Will react with strong acids & alkalis
10.2 Chemical Stability	Stable in diluted form supplied
10.3 Hazardous Reactions	Exothermic with strong acids & alkalis
10.4 Conditions to Avoid	Extreme heat or cold and sources of ignition
10.5 Incompatible Materials	--
10.6 Hazardous decomposition products	Oxides of carbon & nitrogen.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

We have not carried out any animal testing for this product. Any ATE figures quoted below are from Toxicity Classifications that have been carried out using ATE (Acute Toxicity Estimate) Calculation Method using LD50 or ATE figures provided by the Raw Material Manufacturer.

Consideration is only given to components with greater than 1% based on the product formulation and those with a listed exposure limit in Section 8.

Acute Toxicity – Irritant & damaging to tissue and eyes

Component	LD-Lo, Oral, mg/kg	LD-50, Skin mg/kg	LC-50 (Inhalation)	Chronic Consideration
Tetrasodium Ethylenediamine Tetraacetate	1780 (rat)	--	1000-5000 mg/m ³ (related product)	None known

Chronic Toxicity

Carcinogenicity	No evidence
Sensitization	No information available.
Mutagenic Effects	No information available
Reproductive Effects	Some limited evidence.
Developmental Effects	No information available.
Target Organs	Some evidence - Lung
Endocrine Disruptor Info.	No information available.
Other Adverse Effects	The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Ecotoxicity effects

Component	Toxicity to Fish LC-50, mg/l	Exposure Time, Hrs	Comments
Tetrasodium Ethylenediamine Tetraacetate	>1000 (fish - bluegill)	96	

12.3 Bioaccumulation Potential

With the current information available, when used for its intended purpose this product will not cause adverse effects in the environment. Bioaccumulation is not expected.

12.4 Mobility in soil

No soil adsorption expected due to ionic structure.

12.5 Aquatic Toxicity

With the current information available, this is judged to be low at the dilutions that exist.

12.6 Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Discharge used working solutions to drain is acceptable in small amounts due to the dilution of running water. Small amounts (less than 1 Litre) of unwanted concentrated product may be flushed with water to sewer with at least 15 minutes of running water.

Larger volumes of the concentrated product must be sent for disposal using a licensed waste disposal contractor.

Rinse out empty container with water and consign to normal waste.

14. TRANSPORT

Not regulated for Transport

15. REGULATORY INFORMATION

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

EU legislation

Safety Data Sheet prepared in accordance with REACH Commission Regulation (EU) No 453/2010 (which amends Regulation (EC) No 1907/2006). The product is as classified under GHS/CLP- Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures. Ingredients are listed with classification GHS/CLP- Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures.

Guidance

Workplace Exposure Limits EH40.

The National Institute for Occupational Safety and Health (NIOSH) register of Immediately Dangerous to Life or Health Concentrations (IDLH)

16. OTHER INFORMATION

This product does not require any special training before use. Usage and handling instructions are mentioned on packaging and on the first page of this Safety Data Sheet. This health and safety information refers to the concentrated product and has been prepared assuming the intended described use is adhered to. Any unusual or novel use of this product is done without being assessed for the impact nor is it part of the considerations in this document.

Diluted solutions can be considered to be significantly less hazardous although they should always be handled with care.

Key literature references and sources for data

Safety Data Sheet, Misc. manufacturers.

CLP Classification - Table 3.1 List of harmonised classification and labelling of hazardous substances.

CHIP Classification - Table 3.2 The list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC.

ECHA - C&L Inventory database.

Revision comments

This product is now using classification from GHS/CLP - Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures.

Revision date 01/05/2017

The Hazard Statements listed below in this Section No 16 relate to the Raw Materials (Ingredients) in the Product (as listed in Section 3) and NOT the product itself. For the Risk Phrases / Hazard Statements relating to this Product see Section 2.

Hazard statements in full

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 Possible respiratory irritation