

Material Safety Data Sheet

CHEMICAL IMPROVEMENT CO. PTY LTD

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1. Identification of Preparation

Product Name: Auto Dishwash Liquid

Synonyms:

Machine Dishwash Liquid, A.D.W.L.

CAS-No.:

Molecular Formula:

2. Composition/Information on Ingredients

Recommended use: Cleaning aid in Automatic

Dishwashing Machines

Appearance: Clear yellowish liquid with chlorine odour

Chemical entity	c.a.s. no.	proportion
Potassium Hydroxide	1310-58-3	medium
Sodium Hydroxide	1310-73-2	low
Sodium Metasilicate	6834-92-0	low
Sodium Hypochlorite	7681-52-9	low
Water	7732-18-5	high

Low = 0-10%w/v Medium = 10-30%w/v High = >30%w/v

3. Hazards Identification

The substance is Hazardous according to the *Approved Criteria for Classifying Hazardous Substances* [NOHSC:1008(2004)] 3rd Edition.

Corrosive C

R-phrases

R35 Causes severe burns

R31 Contact with acid liberates toxic gas

R36/38 Irritating to eyes and skin

S-phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre.

S28 After contact with skin wash immediately with plenty of water.

S37/39 Wear suitable gloves and eye/face protection.

S45 In case of accident or you feel unwell contact a doctor or Poisons Information Centre immediately (show the label where possible).

S50 Do not mix with acids or oxidants.

Classified as Dangerous Goods for the purpose of transport by Road or Rail. Refer to relevant regulations for storage and transport requirements.

Poisons- Schedule (Aust)/Toxic Substance(NZ): S6

4. FIRST AID MEASURES

Poison Information Centres in each State Capital city can provide additional assistance for scheduled poisons.

INGESTION: Rinse mouth with water. Give water to drink. DO NOT induce vomiting. Seek medical assistance.

EYE CONTACT: If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

SKIN CONTACT: Immediately wash contaminated skin with plenty of water. Remove contaminated clothing and wash before re-use.

INHALATION: If effects occur, remove victim to fresh air. In all instances seek prompt medical attention.

Notes to physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Specific Hazards: Non combustible material. Chlorine decomposes when heated to high temperatures which may rupture container.

Extinguishing Media: Fire-fighters should wear full protective clothing including self-contained breathing apparatus. Use equipment/media appropriate to surrounding fire conditions

6. ACCIDENTAL RELEASE MEASURES

In case of spill ventilate the area of the spill or leak. For small spills, take up with an absorbent material and place in non leaking container; seal tightly for proper disposal.

7. HANDLING & STORAGE

STORAGE: Store in a sealed container with a breathing lid. Keep container closed at all times. Store in a dark, cool well ventilated area away from heat and light.

8. EXPOSURE CONTROL/PERSONAL PROTECTION NATIONAL OCCUPATIONAL EXPOSURE LIMITS

No value assigned for this material by the National Occupational Health and Safety Commission (Worksafe Australia)

Exposure standards for constituents:

	TWA		STEL	
	Ppm	mg/m3	ppm	mg/m3
Potassium Hydroxide	-----	2	Peak limitation	
Chlorine	1	3	Peak limitation	

As published by the National Occupational Health & Safety Commission (Worksafe Australia). Peak Limitation - a ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.

TWA - the time weighted average airborne concentrations over an eight hour working day for a five day working week over an entire working life. STEL (Short Term Exposure Limit) the average airborne concentration over a 15 minute period which should not be exceeded over any time during a normal eight hour day. According to current knowledge these concentrations should neither impair the health of, nor cause undue discomfort to, nearly all workers. These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. Exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

ENGINEERING MEASURES

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Avoid generating and inhaling mists. Use with local exhaust ventilation or while wearing organic vapour respirator or particulate respirator meeting the requirements of AS1715 and AS1716. Do not allow material to dry out. Keep containers closed when not in use.

PERSONAL PROTECTION EQUIPMENT

Wear rubber gloves and splash proof chemical goggles. Use a respirator if ventilation is inadequate.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form/Colour/Odour: Clear water thin liquid with a chlorine odour.

Solubility: Totally soluble in water

Specific Gravity (25 C) 1.18

Melting Point (C): <0

Rel Vapour Density N Av

Boiling Point (C) >100

Vapour Pressure (25 C) N Av

Decomp. Point (C) N Av

Flash Point *

Sublimation Point: N Ap

Flammability Limits N Ap

pH: 14

Autoignition Temp: N Ap

Viscosity: Water thin

% Volatile by volume 0

Evaporation Rate: N Av

N Ap = Not applicable N Av = Not Available

10. STABILITY AND REACTIVITY

Stability: Unstable to heat and direct sunlight. Avoid acids, ammonia, organic compounds and salt.

Decomposition products: Chlorine, Chlorine Dioxide, Chloramines

11. TOXICOLOGICAL INFORMATION

Main symptoms: No adverse health effects expected if the product is handled in accordance with the Safety Data Sheet and the label. Symptoms that may arise if the product is mishandled are:

Ingestion: Swallowing will result in nausea, vomiting and abdominal pain.

Eye contact: A severe eye irritant.

Skin contact: Contact with skin will result in skin irritation.

Inhalation: vapours may cause bronchial sensation and corrosion of mucous membranes, vomiting.

Long Term Effects: No information available for product.

Acute toxicity/Chronic Toxicity: No information available for product.

12. ECOLOGICAL INFORMATION

No information available for product

13. DISPOSAL CONSIDERATIONS

Refer to State Land Waste Management Authority.

14. TRANSPORT INFORMATION

Classified as Dangerous Goods for the purpose of transport by road or rail.

UN No.: 1814

Class: 8

Hazchem Code: 2R

EPG: 8A1

Packaging Group: III

Proper Shipping Name: Potassium Hydroxide Solution

Segregation Dangerous Goods: Dangerous goods for transport. Do not pack with acids, oxidants or ammonia

15. REGULATORY INFORMATION

Hazardous according to criteria of Worksafe Australia

Hazard Category

Corrosive C

R-phrases

R35 Causes severe burns
R31 Contact with acid liberates toxic gas
R36/38 Irritating to eyes and skin

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Poisons Schedule (Aust)/Toxic Substance (NZ): S6

16. OTHER INFORMATION

Issue Date: 20/10/09 **Author:** C.I. Bright
Poisons Information Centres All States: 131126

17. DISCLAIMER

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APPENDIX 1 - INFORMATION SOURCES

1. HAZARD CLASSIFICATION (SEE ALSO CARCINOGENS)

List of Designated Hazardous Substances
NOHSC (National Occupational Health & Safety Commission).

A database of the more common hazardous substances, which provides guidance on the appropriate Risk and Safety information for the MSDS.

Free at:
<<http://www.nohsc.gov.au/OHSInformation/Databases/HazardousSubstances/>>

Classification, hazardous substances, Risk phrases and Safety phrases.

Approved Criteria for Classifying Hazardous Substances
NOHSC (National Occupational Health & Safety Commission).

This document outlines the approved Australian classification criteria used in determining whether a substance is hazardous.

Free at:
http://www.nohsc.gov.au/OHSInformation/NOHSCPublications/fulltext/standards/nohsc1008_toc.htm

2. NOHSC CODES OF PRACTICE

The following codes of practice provide useful information on hazardous substances and Dangerous Goods.

Hazardous Substances
National Code of Practice for the Control of Workplace Hazardous Substances [NOHSC:2007(1994)].

Free at:
<<http://www.nohsc.gov.au/OHSInformation/NOHSCPublications/fulltext/toc/H3-12.htm>>

National Code of Practice for the Control of Scheduled Carcinogenic Substances [NOHSC:2014(1995)].

Free at:
<<http://www.nohsc.gov.au/OHSInformation/NOHSCPublications/fulltext/toc/H3-20.htm>>

Dangerous Goods

National Standard for the Storage and Handling of Workplace Dangerous Goods [NOHSC:1015(2001)].

Free at: http://www.nohsc.gov.au/pdf/standards/NOHSC-2017-2001_COP_pt01.pdf

3. AUSTRALIAN STANDARDS

The Australian Standards for the following classes of Dangerous Goods form an important part of the Dangerous Goods framework and contain useful guidance for the control of the hazards associated with these classes of Dangerous Goods.

Class 2 - Gases

AS/NZS 1596 The storage and handling of LP gas.

AS 1894 Code of practice for the safe handling of cryogenic fluids.

AS 2022 SAA anhydrous ammonia code.

AS 2927 The storage and handling of liquefied chlorine gas.

AS 3961 Liquefied natural gas – storage and handling.

AS 4332 Storage and handling of gases in cylinders.

Class 3 - Flammable and Combustible Liquids

AS 1940 The storage and handling of flammable and combustible liquids.

Class 5 - Oxidizing Agents and Organic Peroxides

AS 2714 The storage and handling of hazardous chemical materials - Class 5.2 substances (organic peroxides).

AS 4326 The storage and handling of oxidising agents.

Class 6 - Toxic Substances

AS/NZS 4452 The storage and handling of toxic substances.

AS 4081 The storage, handling and transport of liquid and liquefied polyfunctional isocyanates.

Class 8 - Corrosive Substances

AS 3780 The storage and handling of corrosive substances.

Class 9 - Miscellaneous

AS/NZS 4681 The storage and handling of Class 9 (miscellaneous) Dangerous Goods and articles.

Mixed Classes

AS/NZS 3833 The storage and handling of mixed classes of Dangerous Goods in packages and intermediate bulk containers.

Subscription details at: <<http://www.standards.com.au>>

4. EXPOSURE STANDARDS

Exposure Standards for Atmospheric Contaminants in the Occupational Environment.

Exposure Standards Database.

NOHSC (National Occupational Health & Safety Commission).

The Exposure Standards database is a searchable database providing the airborne concentrations of individual chemical substances, which according to current knowledge should neither impair the health of, nor cause undue discomfort to, nearly all workers. The exposure standards serve as guides only.

5. PERSONAL PROTECTIVE EQUIPMENT

HAZARDTEXT

Micromedex.

HAZARDTEXT information to assist with the management of hazardous chemical incidents such as spills or leaks - toxicity, fire and explosion data, chemical reactivity, personal protective equipment and disposal guidelines. A good source of information on personal protective equipment.

Subscription details at: <<http://www.micromedex.com>>

Hazardous substances, chemical spills, emergency procedures, and personal protective equipment.

6. TOXICITY REVIEWS

The following sources provide full text reviews of the toxicity of chemical substances.

Environmental Health Criteria

International Programme on Chemical Safety.

These criteria are reviews of environmental and toxicological literature on chemicals and physical agents published as a joint venture of the United Nations Environment Programme, the International Labour Organization and the World Health Organization.

Free at: <http://www.inchem.org/pages/ehc.html>

END OF MATERIAL SAFETY DATA SHEET