SAFETY DATA SHEET



W32 DISHMACHINE DETERGENT

Catalogue number: AC212 Version No: 3.2 Issue date:13/07/2023 Safety Data Sheet according to WHS and ADG requirements.

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	W32 DISHMACHINE DETERGENT	
Synonyms	AC212	
Proper shipping name	POTASSIUM HYDROXIDE SOLUTION	
Other means of identification	Not Available	

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

Relevant identified uses Chlorinated machine dishwashing liquid

Details of the supplier of the safety data sheet

Registered company name	VERIDIA Australia	
Address	10 Voyager Circuit, Glendenning, NSW, 2761.	
Telephone	1300 228 222	
Website	www.veridia.com.au	
Email	admin@veridia.com.au	

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 1126
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	6
GHS Classification Skin Corrosion/Irritation Category 1B, Serious Eye Damage Category 1, Metal Corrosion Category 1	
	Classification drawn from HCIS and ECHA C&L Inventory

Label elements

Hazard pictograms



SIGNAL WORD DANG

Hazard statement(s)

		1
H314	Causes severe skin burns and eye damage	
AUH031	Contact with acid liberates toxic gas	100
H290	May be corrosive to metals	100

Precautionary statement(s) Prevention

P260	Do not breathe vapours.	
P280	Near protective gloves / protective clothing / eye protection / face protection.	
P234	Keep only in original container.	
P264	Wash contaminated skin thoroughly after handling	

W32 DISHMACHINE DETERGENT Issue Date: 13/07/2023 Product Code: AC212 Version No: 3.2

Precautionary statement(s) Response

P301+P310+P330+P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.	
P303+P310+P361+P353	IF ON SKIN (or hair): Immediately call a POISON CENTER or doctor. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.	
P305+P310+P351+P338	IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P304+P310+P340	Wash contaminated clothing before reuse.	
P363		
P390		

Precautionary statement(s) Storage

P405 Store locked up

Precautionary statement(s) Disposal

P501 Dispose of contents/container in accordance with local regulations

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1310-73-2	10-<30	sodium hydroxide
1310-58-3	<10	potassium hydroxide
10213-79-3	<10	sodium metasilicate, pentahydrate
7681-52-9	<10 av chlorine	sodium hypochlorite
37971-36-1	<10	phosphonobutane-1,2,4-tricarboxylic acid

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Obtain medical advice / attention without delay. Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. If required, transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: Obtain medical advice / attention without delay. Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear. Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre. Transport to hospital, or doctor.
Inhalation	If fumes or combustion products are inhaled remove from contaminated area. Obtain medical advice / attention without delay. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor. Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema. Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs). As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested. Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered. This must definitely be left to a doctor or person authorised by him/her.
Ingestion	For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Transport to hospital or doctor without delay.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

For acute or short-term repeated exposures to highly alkaline materials:

- $\blacksquare \ \ \, \text{Respiratory stress is uncommon but present occasionally because of soft tissue edema}. \\$
- ▶ Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary.
- Oxygen is given as indicated.
- $\blacksquare \ \ \, \text{The presence of shock suggests perforation and mandates an intravenous line and fluid administration.}$
- Pamage due to alkaline corrosives occurs by liquefaction necrosis whereby the saponification of fats and solubilisation of proteins allow deep penetration into the tissue.

Alkalis continue to cause damage after exposure.

W32 DISHMACHINE DETERGENT Issue Date: 13/07/2023 Product Code: AC212 Version No: 3.2

INGESTION:

▶ Milk and water are the preferred diluents

No more than 2 glasses of water should be given to an adult.

- ▶ Neutralising agents should never be given since exothermic heat reaction may compound injury.
- * Catharsis and emesis are absolutely contra-indicated.
- * Activated charcoal does not absorb alkali.
- * Gastric lavage should not be used.

Supportive care involves the following:

- ► Withhold oral feedings initially.
- ▶ If endoscopy confirms transmucosal injury start steroids only within the first 48 hours.
- ▶ Carefully evaluate the amount of tissue necrosis before assessing the need for surgical intervention.
- ▶ Patients should be instructed to seek medical attention whenever they develop difficulty in swallowing (dysphagia).

SKIN AND EYE:

▶ Injury should be irrigated for 20-30 minutes.

Eye injuries require saline. [Ellenhorn & Barceloux: Medical Toxicology]

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- Water spray or fog.
- ► Foam.
- ► Dry chemical powder.
- ► BCF (where regulations permit).
- ▶ Carbon dioxide.

Special hazards arising from the substrate or mixture

Special nazarus arising from the substrate of mixture		
Fire incompatibility	mpatibility None known	
Advice for firefighters		
Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use firefighting procedures suitable for surrounding area. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.	
Fire/Explosion Hazard	May emit toxic chlorine fumes. Non-combustible. Not considered a significant fire risk, however containers may burn.	
HAZCHEM 2R		

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, prote	ective equipment and emergency procedures
Minor Spills	Environmental hazard - contain spillage. Check regularly for spills and leaks. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills	Environmental hazard - contain spillage. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling.

Page **4** of **8**/32 DISHMACHINE DETERGENT

Product Code: AC212 W32 DISHMACHINE DETERGENT Issue Date: 13/07/2023
Version No: 3.2

Store in original containers.

Keep containers securely sealed.

Store in a cool, dry, well-ventilated area.

Other information

Store away from incompatible materials and foodstuff containers.

Protect containers against physical damage and check regularly for leaks.

Observe manufacturer's storage and handling recommendations contained within this SDS.

DO NOT store near acids, or oxidising agents

No smoking, naked lights, heat or ignition sources.

Conditions for safe storage, including any incompatibilities

Suitable container	Store only in original containers.
Storage incompatibility	Contact with acids produces toxic fumes Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air. Avoid contact with copper, aluminium and their alloys.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	sodium hydroxide	Sodium hydroxide	Not Available	Not Available	2 mg/m3	Not Available
Australia Exposure Standards	potassium hydroxide	Potassium hydroxide	Not Available	Not Available	2 mg/m3	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
sodium hydroxide	Sodium hydroxide	Not Available	Not Available	Not Available
potassium hydroxide	Potassium hydroxide	0.18 mg/m3	2 mg/m3	54 mg/m3
sodium metasilicate, pentahydrate	Sodium metasilicate pentahydrate	45 mg/m3	45 mg/m3	170 mg/m3
sodium hypochlorite	Sodium hypochlorite	2 mg/m3	20 mg/m3	630 mg/m3

Ingredient	Original IDLH	Revised IDLH
sodium hydroxide	250 mg/m3	10 mg/m3
potassium hydroxide	Not Available	Not Available
sodium metasilicate, pentahydrate	Not Available	Not Available
sodium hypochlorite	Not Available	Not Available

Exposure controls

cposure controls	
Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	
Eye and face protection	Safety glasses with unperforated side shields OR Chemical goggles, whenever there is a danger of the material coming in contact with the eyes. Goggles must be properly fitted. Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes; these afford face protection. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Lens should be removed at the first signs of eye redness or irritation. Lens should be removed in a clean environment only after workers have washed hands thoroughly.
Skin protection	See Hand protection below
Hands/feet protection	Elbow length Neoprene gloves When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.
Body protection	See Other protection below
Other protection	Overalls. PVC Apron. Eyewash unit. Ensure there is ready access to a safety shower.
Thermal hazards	Not Available

Issue Date: 13/07/2023

Product Code: **AC212**Version No: **3.2**

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear yellow liquid		
Appearance	Oldar yollow liquid		
Physical state	Liquid	Relative density (Water = 1)	1.345
Odour	Mild chlorine	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	14	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit(%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Contact with acids liberates toxic gas
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhaling corrosive bases may irritate the respiratory tract. Symptoms include cough, choking, pain and damage to the mucous membrane. The material has NOT been classified by EC Directives or other classification systems as 'harmful by inhalation'. This is because of the lack of corroborating animal or human evidence.
Ingestion	Ingestion of alkaline corrosives may produce burns around the mouth, ulcerations and swellings of the mucous membranes, profuse saliva production, with an inability to speak or swallow. Both the oesophagus and stomach may experience burning pain; vomiting and diarrhoea may follow. Ingestion of hypochlorites may cause burning in the mouth and throat, abdominal cramps, nausea, vomiting, diarrhoea, pain and inflammation of the mouth and stomach, fall of blood pressure, shock, confusion, and delirium. Severe poisonings may lead to convulsion, coma and death. Ingestion irritates the mouth, throat, and stomach. The hypochlorous acid liberated in the stomach can cause wall perforation, toxemia, haemorrhage and death.
Skin Contact	The material can produce severe chemical burns following direct contact with the skin. Contact may cause severe itchiness, skin lesions and mild eczema. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Еуе	If applied to the eyes, this material causes severe eye damage. Direct eye contact with corrosive bases can cause pain and burns. There may be swelling, epithelium destruction, clouding of the cornea and inflammation of the iris. Mild cases often resolve; severe cases can be prolonged with complications such as persistent swelling, scarring, permanent cloudiness, bulging of the eye, cataracts, eyelids glued to the eyeball and blindness.
Chronic	Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of th jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue.

Page 6 of 8

W32 DISHMACHINE DETERGENT Product Code: AC212 Issue Date: 13/07/2023 Version No: 3.2

T	oxico	logical	effects	of	ingredients
•	OAICO	ogicui	CHCCtS	v.	ingi culciita

permanen
water at 6
normono
permaner

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Oxioty .				
	Endpoint	Duration (Hr.)	Species	Value
sodium hydroxide	LC50	96	Fish	<180mg/L
	EC50	48	Crustacea	40.4mg/L
potassium hydroxide	LC50	96	Fish	80mg/L
	EC0	48	Crustacea	<1mg/L
	NOEC	24	Fish	28mg/

Page **7** of **8**

Issue Date: 13/07/2023

Product Code: AC212 **W32 DISHMACHINE DETERGENT** Version No: 3.2

sodium metasilicate	LC50	96	Fish	2-320mg/L
				, , , , , , , , , , , , , , , , , , ,
pentahydrate	EC50	48	Crustacea	1-700mg/L
	EC50	72	Algae or other aquatic plants	207mg/L
	EC100	48	Crustacea	10-mg/L
sodium hypochlorite	LC50	96	Fish	0.037mg/L
	EC50	48	Crustacea	0.026mg/L
	EC50	72	Algae or other aquatic plants	0.018mg/L
	NOEC	72	Algae or other aquatic plants	0.005mg/L
phosphonobutane-1,2,4- tricarboxylic acid	EC50	24	Water flea (Daphnia magna)	>265 mg/L
	LC50	48	Rainbow trout (Oncorhynchus mykiss)	>3440 mg/L
	LC50	48	Golden orfe (Leuciscus idus)	>500 mg/L
	EC50	72	Scenedesmus subspicatus	140 mg/L
	EC50	96	Algae	860 mg/L

 ${\sf Extracted from \, Europe \, ECHA \, Registered \, Substances \, - \, Ecotoxicological \, Information \, - \, Aquatic \, Toxicity}$

On the basis of available evidence concerning either toxicity, persistence, potential to accumulate and or observed environmental fate and behaviour, the material may present a danger, immediate or long-term and /or delayed, to the structure and/ or functioning of natural ecosystems. Prevent, by any means available, spillage from entering drains or water courses.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
sodium hydroxide	LOW	LOW

Bio accumulative potential

Ingredient	Bioaccumulation
sodium hydroxide	LOW (LogKOW = -3.8796)

Mobility in soil

Ingredient	Mobility
sodium hydroxide	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulation.
	3 3

SECTION 14 TRANSPORT INFORMATION

Labels Required

	CORROSIVE
Marine Pollutant	NO
HAZCHEM	2R

Land transport (ADG)

UN number	1814		
Packing group			
UN proper shipping name	POTASSIUM HYDROXIDE SOLUTION		
Environmental hazard	No relevant data		
Transport hazard class(es)	Class 8 Sub risk Not Applicable		
Special precautions for user	Special provisions Not Applicable Limited quantity 1 L		

Page **8** of **8** ws2 dishmachine detergent

Product Code: AC212 W32 DISHMACHINE DETERGENT Issue Date: 13/07/2023
Version No: 3.2

SECTION 15 REGULATORY INFORMATION

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

SODIUM HYDROXIDE (1310-73-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australian Inventory of Industrial Chemicals (AIIC)

POTASSIUM HYDROXIDE (1310-58-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)

$^{\parallel}$ SODIUM METASILICATE, PENTAHYDRATE (10213-79-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australian Inventory of Industrial Chemicals (AIIC)

SODIUM HYPOCHLORITE (7681-52-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6 Australian Inventory of Industrial Chemicals (AIIC) International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

PHOSPHONOBUTANE-1,2,4-TRICARBOXYLIC ACID IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australian Inventory of Industrial Chemicals (AIIC)

SECTION 16 OTHER INFORMATION

Contact Point: Poisons Information Centre Tel 13 11 26

Revision Schedule

Revision Date	21/10/2022
Initial Date	08/12/2016

SDS Version Summary

Version	Issue Date	Sections Updated
3.1	05/02/2021	Sections 2,5,11,12,15,16 have been updated or corrected
3.2	21/10/2022	Sections 3, 11, 12, 15.

Other information

DISCLAIMER:

All information appearing herein is based upon data obtained from raw material manufacturers and/or recognized technical sources. While the information above is believed to be true and accurate, the author makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the control of VERIDIA Australia and therefore the users are responsible to verify this data under their own particular conditions of use, applications and regulations to determine whether the product is suitable for their particular purpose and they assume all risks of their use, handling, disposal, reliance upon, publication or use of the information contained herein. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures or processes.

Definitions and abbreviations

PC-TWA; Permissible Concentration-Time Weighted Average
PC-STEL: Permissible Concentration-Short Term Exposure Limit
IARC: International Agency for Research on Cancer
ACGIH: American Conference of Government Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit

IDLH: Immediate Danger to Life or Health Concentrations
OSF: Odour Safety Factor

NOAEL: No Observed Effects Level
TLV: Threshold Limit Value
LOD: Limit Of Detection
OTV: Odour Threshold Value
BCF: Bio Concentration Factors
BEI: Biological Exposure Index

This document is copyright.

Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from VERIDIA Australia.

End of SDS