Safety Data Sheet

1. IDENTIFICATION OF MATERIAL AND SUPPLIER

Product Name:	CLG091 - Phosphate Free Antibacterial Dishwashing Liquid 5L
Other Names:	
Recommended use of the chemical and restrictions on use:	Phosphate Free Antibacterial Dishwashing Liquid 5L
Supplier:	Modern Teaching Aids
Street Address:	Level 1, 122-126 Old Pittwater Road Brookvale 2100 Australia
Telephone:	1800 251 497 (AU) 0800 808 044 (NZ)
Facsimile:	1800 151 492 (AU) 0800 682 329 (NZ)
Emergency Telephone Number:	1800 251 497 (AU) 0800 808 044 (NZ)

2. HAZARDS IDENTIFICATION

Classified as Hazardous according to the criteria of Safe Work Australia; HAZARDOUS SUBSTANCE.

GHS classification:
Acute toxicity – category 4.
Skin corrosion/irritation - category 1.
Eye damage/irritation – category 1
Specific target organ toxicity (single exposure) – category 3

Signal word: DANGER

Pictograms:
GHS05: Corrosion

GHS07: Exclamation mark

Hazard statements:
H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.

Precautionary statements:
P264: Wash hands with water thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P260: Do not breath dusts or mists.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

P271: Use only outdoors or in a well-ventilated area.

Response:
P301 + P312: IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.
P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell.
P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P363: Wash contaminated clothing before reuse.
P304 + P340 + P310: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTRE or doctor/physician.
P321: Specific treatment (see First Aid Measures on Safety Data Sheet)
P305 + P351 + P338 + P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician.
P312: Call a POISON CENTRE or doctor/ physician if you feel unwell.

Storage:
P405: Store locked up.
P403 + P233: Store in well-ventilated place. Keep container tightly closed.

Disposal:
P501: Dispose of contents/ container in accordance with local/ regional/ national/ international Regulations.

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by road or rail.

Poisons Schedule Number: S5

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Sodium Metasilicate Pentahydrate	10213-79-3	< 30%	H335, H314
Sodium Carbonate	497-19-8	< 30%	H318, H335
Sodium Percarbonate	15630-89-4	< 10%	H302, H318, H315, H335
Enzyme Blend		< 1 %	-
Non–Hazardous components		30 – 60%	-

4. FIRST AID MEASURES

Description of first aid measures

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin contact: Wash contaminated skin with plenty of water. Remove contaminated clothing and wash before reuse. If irritation occurs seek medical advice.

Eye contact: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Seek IMMEDIATE medical assistance.

Ingestion: Rinse mouth with water. Give water to drink Do NOT induce vomiting. Seek medical assistance.

Symptoms caused by exposure

Refer to section 2 and 11.

Medical attention and special treatment

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing equipment:

Water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards arising from the chemical:

Non-flammable, but will support the combustion of other material.

Special protective equipment and precautions for firefighters:

Not flammable but will support combustion of organic materials. Keep containers cool with water spray. Heating can cause decomposition leading to violent rupture of containers and the liberation of oxygen, causing combustible materials to burn more fiercely. If safe to do so, remove containers from path of fire. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of decomposition.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment to prevent skin and eye contamination and inhalation of dust.

Environmental precautions:

Avoid release to the environment.

Methods and materials for containment and cleaning up:

Cover with damp absorbent (inert material, sand or soil). Sweep up, but avoid generating dust. Collect and seal in properly labelled clean plastic containers with loose fitting lids.

7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid skin and eye contact. Wear protective equipment to prevent skin and eye contact and inhalation of dusts.

Conditions for safe storage:

Store in a cool (below 40°C), dry place out of direct sunlight in a well ventilated area. Store away from acids, alkalis, oxidising agents, reducing agents, rust, transition metals and their compounds, as well as organic and combustible materials. Keep containers closed at all times - check regularly for spills.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures: No value assigned for this specific material by Safe Work Australia. However, Exposure Standard(s) for constituents(s):

Chemical name	TWA (ppm)	TWA (mg/m^3)	STEL (ppm)	STEL (mg/m^3)	Advisory carcinogen category	Other advisory information
Nuisance dusts	-	10	-	-	-	-

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA – The time-weighted average airborne concentration 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 at any time during a normal eight-hour work day. According to current knowledge these concentrations should neither impair the health of, nor cause undue discomfort to, nearly all workers.
The recommended hygiene standard (TWA) is the time-weighted average airborne concentration over an eight hour working day, for a five day working week over an entire working life. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

Engineering controls:
Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Keep containers closed when not in use.

Individual protection measures, such as Personal Protective Equipment (PPE):
OVERALLS, SAFETY GLASSES, GLOVES(S), DUST MASK.
Avoid skin and eye contact and inhalation of dust. Wear overalls, chemical goggles and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or reusing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: White, perfumed powder with granular specs.
pH (1% aq soln.): 11.0
Solubility in water (g/L): 300g/L

10. STABILITY AND REACTIVITY

Reactivity: Reacts exothermically with acids. Solutions are strong bases. Hygroscopic: absorbs moisture or water from surrounding air.

Chemical stability: Stable under ordinary conditions of use and storage.

Possibility of hazardous reactions: Corrosive to some metals liberating flammable hydrogen gas. Reacts exothermically with acids.

Conditions to avoid: Moisture, heat, dusting and incompatibles.

Incompatible materials: Fluorine, aluminium, phosphorous pentoxide, sulfuric acid, zinc, lithium, moisture, calcium hydroxide and 2,4,6-trinitrotoluene. Reacts violently with acids to form carbon dioxide.

Hazardous decomposition products: Oxides of carbon and sodium oxide.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium carbonate	LD50: 2800 mg/kg (rat)	LD50: >2000 mg/kg (rat)	LC50: 0.8 mg/L/2hr (guinea pig) LC50: 1.2 mg/L/2hr (mouse) LC50: 2.3 mg/L/2hr (rat)
Sodium percarbonate	LD50: 1034 mg/kg (rat) LD50: 2000 mg/kg (mice)	LD50: >2000 mg/kg (rabbit)	LC50: >4.58 mg/L/1h (rats)
Sodium metasilicate	Oral LD50: 847 mg/kg (rat)	-	-

Skin corrosion/irritation: Causes severe skin burns, redness, pain.

Serious eye damage/irritation: Causes serious eye damage; Corrosive to eyes - May cause permanent injury, blindness.

Respiratory or skin sensitisation: SODIUM PERCARBONATE: respiratory irritant with an RD50 (concentration producing 50 % respiratory rate decrease) of ~700 mg/m^3.

Germ cell mutagenicity: No information available.

Cancerogenicity: No information available.

Reproductive toxicity: No information available.

Specific Target Organ Toxicity (STOT): - single exposure: May cause respiratory irritation; May cause chemical burns to the respiratory tract.

Specific Target Organ Toxicity (STOT): - repeated exposure: No information available.

Aspiration hazard: No data available.

Likely routes of exposure: Skin contact. Eye contact.

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

Ingestion:	Swallowing can result in vomiting, irritation of the gastrointestinal tract and decomposition may occur in the stomach leading to the production of oxygen gas.
Skin contact:	Contact with the skin will result in irritation.
Eye contact:	A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.
Inhalation:	Inhalation of dust may result in respiratory irritation and possible allergic reactions.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	SODIUM METASILICATE: 96h LC50 = 210 mg/L for fish (zebra fish). SODIUM CARBONATE: 48 h-EC50 = 250mg/L for crustaceans (Daphnia magna)
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
Other adverse effects:	Avoid release to the environment

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13. DISPOSAL CONSIDERATIONS

Refer to State Land Waste Management Authority.

14. TRANSPORT INFORMATION

Road and Rail Transport: Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by road or rail.

Marine Transport: Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport: Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

Classified as Hazardous according to the criteria of Safe Work Australia.

Poisons Schedule: S5
Number

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

This Safety Data sheet has been prepared by Modern Teaching Aids
This SDS summarises at the date of issue our best knowledge of the health and safety information of the product, and in particular how to safely handle and use the product in the workplace. As each workplace is different each user must, prior to use, review thus SDS in the context of how the user intends to handle and use the product in the workplace.If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact Stelco Chemicals International Pty Ltd at the contact details on page 1