SAFETY DATA SHEET



PREMIUM MACHINE DISHWASHING POWDER

STE PRODUCTS

Catalogue number: CT219 Version No: 2.2 Issue date: 15/07/2021 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	PREMIUM MACHINE DISHWASHING POWDER	
Product code	CT219	
Pack size	4.5 kg	
Proper shipping name	DISODIUM TRIOXOSILICATE	

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

Details of the manufacturer/importer

	<u> </u>
Registered company name	Ste Products
Address	4 Excelsior St, Lisarow NSW 2250 Australia
Telephone	1300 720 353
Website	www.steproducts.com.au
Email	sales@steproducts.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 Model WHS Regulations and the ADG Code.

Poisons Schedule	5	
GHS Classification	Serious Eye Damage Category 1, Skin Corrosion/Irritation Category 1B, STOT - SE (Resp. Irr.) Category 3,	
	Classification drawn from HCIS and ECHA C&L Inventory.	

Label elements

GHS label elements





SIGNAL WORD	DANGER

Hazard statement(s)

H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H335	May cause respiratory irritation
Procautionary statement(s) Provention	

Precautionary statement(s) Prevention		
P260	Do not breathe dust.	
P271	Use only outdoors or in a well-ventilated area.	
P280	Wear protective gloves / eye protection / face protection.	

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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. 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	IF INHALED: Immediately call a POISON CENTER or doctor. Remove person to fresh air and keep at rest in a position comfortable for breathing.	
P363	Wash contaminated clothing before reuse.	

Precautionary statement(s) Storage

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

Precautionary statement(s) Disposal

P501 Dispose of contents / container in accordance with local government regulations

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
10213-79-3	10-<30	disodium trioxosilicate
7758-29-4	30-60	sodium tripolyphosphate
64-02-8	<10	EDTA tetrasodium salt
15630-89-4	10-<30	sodium percarbonate
497-19-8	10-<30	sodium carbonate

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES

Descripti	ion of	first	aid	measures

Eye Contact	If this product comes in contact with the eyes: Seek medical advice / attention immediately. 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 instructed to do so, 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: 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. Seek medical advice and transport to hospital or doctor if instructed to do so. If irritation persists, seek medical advice / attention.
Inhalation	If inhaled, remove person from contaminated area to fresh air. 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. Get medical advice / attention without delay.
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. 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. Observe the patient carefully.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

	Water spray or fog.
	Foam.
Extinguishing media	Dry chemical powder.
	BCF (where regulations permit).
	Carbon diovide

Special hazards arising from the substrate or mixture

Fire incompatibilities

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

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Advice for firefighters

Fire Fighting	The product is not flammable or combustible. HOWEVER if fire should occur for other reasons: 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. 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	Product may release oxygen when heated which may stimulate the fire. Combustion may cause the release of carbon monoxide (CO) and carbon dioxide (CO2).
HAZCHEM	2X

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Environmental hazard - contain spillage. Check regularly for spills and leaks. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Use dry clean up procedures and avoid generating dust. Place in a suitable, labelled container for waste disposal.	
Major Spills	Pick up using a plastic shovel and place into labelled drums and dispose of according to local government regulations. Prevent by any means available to prevent any spillage entering a watercourse. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle	
PPE	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. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Always wash hands with soap and water after handling.
Other information	Store in original containers. Store in a cool, dry, well-ventilated area. 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

Conditions for safe storage, including any incompatibilities

Suitable container	Plastic pail. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	Avoid storing with strong acids.

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
sodium carbonate	Soda ash	7.6 mg/m3	83 mg/m3	500 mg/m3
sodium metasilicate, pentahydrate	Sodium metasilicate pentahydrate	6.6 mg/m3	73 mg/m3	440 mg/m3
sodium tripolyphosphate	Sodium tripolyphosphate	0.22 mg/m3	2.5 mg/m3	620 mg/m3
EDTA tetrasodium salt	Ethylenediaminetetraacetic acid, tetrasodiumn salt; (Tetrasodium EDTA)	82 mg/m3	830 mg/m3	5000 mg/m3

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Ingredient	Original IDLH	Revised IDLH
sodium carbonate	Not Available	Not Available
sodium metasilicate, pentahydrate	Not Available	Not Available
sodium tripolyphosphate	Not Available	Not Available
EDTA tetrasodium salt	Not Available	Not Available
sodium percarbonate	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. If ventilation is poor, the use of a local extraction 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.
Skin protection	See Hand protection below
Hands/feet protection	Elbow length gloves. Natural rubber or nitrile is recommended for this application.
Body protection	See Other protection below
Other protection	Eyewash unit. If atmosphere is dusty, the use of respiratory protection is recommended.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

	our and enemiour properties		
Appearance	White powder with blue flecks		
Physical state	Divided Solid Powder	Relative density (Water = 1)	Not Applicable
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature(°C)	Not Applicable
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Applicable	Viscosity (cSt)	Not Applicable
Initial boiling point and boiling range (°C)	Not Applicable	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 ormN/m)	Not Applicable
Lower Explosive Limit(%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Applicable	Gas group	Not Available
Solubility in water (g/L)	Partly miscible	pH as a solution (1%)	13
Vapour density (Air = 1)	Not Applicable	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

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SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhaling the product may irritate the respiratory tract. Symptoms include cough, choking, pain and damage to the mucous membrane.
Ingestion	Ingestion 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. Accidental ingestion of the material may be damaging to the health of the individual.
Skin Contact	The material can produce severe chemical burns following direct contact with the skin. Skin contact is not thought to have harmful health effects (as classified under EC Directives 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 useof 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 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 skin contact may cause drying and cracking of the skin and possibly dermatitis. Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Toxicological effects of ingredients

sodium metasilicate	Acute toxicity	LD50 Oral - rat - 847 mg/kg
pentahydrate	Skin corrosion/irritation	Corrosive. Causes skin burns
	Eye damage/irritation	Corrosive. Causes eye burns
	Respiratory/skin sensitization	No Data Available
	Germ cell mutagenicity	Sodium silicate was not mutagenic to the bacterium E. Coli when tested in a mutagenicity bioassay
	Carcinogenicity	There are no known reports of carcinogenicity of sodium silicates.
	Reproductive toxicity	Decreased numbers of births and survival to weaning was reported for rats fed sodium silicate in their drinking water at 600 and 1200 ppm.
	STOT (single exposure)	Dust corrosive to respiratory tract
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available
sodium tripolyphosphate	Acute toxicity	Oral LD50 (rat) 2000 mg/kg Inhalation LC50 (rat) 390 mg/kg Dermal LD50 (rat) 4640 mg/kg
	Skin corrosion/irritation	Not a skin irritant
	Eye damage/irritation	no adverse effect observed (not irritating)
	Respiratory/skin sensitization	no adverse effect observed (not sensitising)
	Germ cell mutagenicity	No adverse effect observed (negative)
	Carcinogenicity	This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens
	Reproductive toxicity	No Data Available
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available
EDTA tetrasodium salt	Acute toxicity	Oral LD50 (rat): >1780 - <2000 mg/kg
	Skin corrosion/irritation	Contact with skin may result in irritation
	Eye damage/irritation	Irritant (rabbit).
	Respiratory/skin sensitization	Not sensitizing
	Germ cell mutagenicity	No adverse effect observed
	Carcinogenicity	Not listed as carcinogenic according to the International Agency for Research on Cancer (IARC).
	Reproductive toxicity	No Data Available
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available
sodium percarbonate	Acute toxicity	Oral LD50 (rat) 1034 – 2000 mg/kg Dermal LD50 (rabbit) >2000 mg/kg
socium percarbonate	Skin corrosion/irritation	Mild irritant (Rabbit).
	Eye damage/irritation	Causes serious eye damage
	Respiratory/skin sensitization	Not a skin sensitizer
	Germ cell mutagenicity	No adverse effect observed in tests conducted
	Carcinogenicity	Not a carcinogen
	Reproductive toxicity	Unlikely to be toxic to reproduction
	STOT (single exposure)	No Data Available
	STOT (repeated exposure)	No Data Available
	Aspiration toxicity	No Data Available
sodium carbonate	Acute toxicity	Oral LD50 (rat) 2800 mg/kg Dermal LD50 (rat) 2000 mg/kg
30ululli carbollate	Skin corrosion/irritation	Prolonged or repeated contact may cause mild irritation
	Eye damage/irritation	Irritant. May cause pain, redness, discomfort
	Respiratory/skin sensitization	Not sensitizing
	Germ cell mutagenicity	Not genotoxic
	Carcinogenicity	No Data Available
		Not toxic to reproduction
	Reproductive toxicity	
	Reproductive toxicity STOT (single exposure)	
	Reproductive toxicity STOT (single exposure) STOT (repeated exposure)	No data available No data available

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SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
sodium carbonate	LC50	96	Fish	300-mg/L
	EC50	48	Crustacea	-156.6-298.9mg/L
	EC50	96	Algae or other aquatic plants	242-mg/L
	NOEC	48	Crustacea	<424-mg/L
sodium metasilicate,	LC50	96	Fish	210mg/L
pentahydrate	EC50	48	Crustacea	-22.94-49.01mg/L
	EC50	72	Algae or other aquatic plants	207mg/L
	EC0	72	Algae or other aquatic plants	35mg/L
	NOEL	120	Algae or other aquatic plants	2.172668-mg/L
sodium percarbonate	EC50	48	Crustacea	=4.9mg/L
	NOEC	48	Crustacea	=2mg/L
EDTA tetrasodium salt	LC50	96	Fish	41mg/L
	EC50	48	Crustacea	140mg/L
	EC50	72	Algae or other aquatic plants	=1.01mg/L
	EC10	72	Algae or other aquatic plants	=0.48mg/L
	NOEC	33	Algae or other aquatic plants	0.0003802-mg/L
odium tripolyphosphate	EC50	48	Crustacea	>70.7-<101.3mg/L
	EC50	96	Algae or other aquatic plants	69.2mg/L

Harmful to aquatic organisms

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 carbonate	LOW	LOW

Bio accumulative potential

Ingredient	Bio accumulation
sodium carbonate	LOW (LogKOW = -0.4605)

Mobility in soil

Ingredient	Mobility
sodium carbonate	HIGH (KOC = 1)

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 regulations.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	2X

Land transport (ADG): Not applicable - NOT REGULATED FOR THE TRANSPORT OF DANGEROUS GOODS WHEN IN PACK SIZES OF 5KG OR LESS

SECTION 15 REGULATORY INFORMATION

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

SODIUM CARBONATE 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)

SODIUM METASILICATE, PENTAHYDRATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australian Inventory of Industrial Chemicals (AIIC)

SODIUM PERCARBONATE 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)

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EDTA TETRASODIUM SALT 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 4 Australian Inventory of Industrial Chemicals (AIIC)

SODIUM TRIPOLYPHOSPHATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australian Inventory of Industrial Chemicals (AIIC)

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	15/07/2021
Initial Date	08/12/2016

SDS Version Summary

Version	Issue Date	Sections Updated
2.1	07/01/2021	Sections 1, 2, 3, 5, 8, 11, 12, 15, 16 have been updated or corrected
2.2	15/07/2021	Sections 1, 3 and 14

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

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Definitions and abbreviations

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

Short Term Exposure Limit

TEEL:

Temporary Emergency Exposure Limit
Immediate Danger to Life or Health Concentrations IDLH:

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

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