



SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product: **C-Tec CDD Warewash Detergent**
Other Names: CDD – Commercial Dishwash Detergent
Product Use: Commercial Automatic Dishwasher Detergent
Restriction of Use: Refer to Section 15

New Zealand Supplier: **2CARE PRODUCTS**
Address: 9 Donnor Place
Mt Wellington
Auckland

Telephone: 0800 753 753
Fax: 09 574 5999

Emergency No: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 25 June 2022 v2

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: Cleaning Products (Corrosive) – HSR002526

Pictograms:



Signal Word: **DANGER**

GHS Classification and Category	HSNO Classification	Hazard Code	Hazard Statement
Corrosive to metals Cat. 1	8.1A	H290	May be corrosive to metals.
Skin corrosion Cat. 1B	8.2B	H314	Causes severe skin burns and eye damage.
Serious eye damage Cat. 1	8.3A	H318	Causes serious eye damage.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P234	Keep only in original container.
P260	Do not breathe fumes, vapours or spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P301 + P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage Code	Storage Statement
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.

Disposal Code	Disposal Statement
P501	Do not let this product enter the environment. Do not dispose of in waterways or sewers. Dispose of this material and its container as hazardous waste, via a licensed facility. See local council for disposal/recycling information.

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Sodium Hydroxide	11 - 15	1310-73-2
Non-hazardous ingredients	To Balance	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	IMMEDIATELY flush eyes with copious amounts of water for at least 30 minutes while holding eyelids open. Take care not to rinse contaminated water into the non-affected eye. Washing must be started within 10 seconds of contact and continued for 30 minutes to prevent permanent injury. Seek immediate medical attention. An Ophthalmology consultation is a must.
If on Skin	REMOVE contaminated clothing. IMMEDIATELY flush the contaminated skin thoroughly with water for at least 15 minutes. Seek medical attention URGENTLY if burning or irritation persists.
If Swallowed	Do not induce vomiting. Give water to drink immediately to dilute. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Call a POISON CENTER or doctor/physician if you feel unwell.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion:	Not applicable
Inhalation:	Not applicable
Skin:	Causes skin burns.

Eye: Causes severe eye damage.

Notes to Doctor: Treat symptomatically based on judgement of doctor and individual reactions of patient.

Safety measures: Potable water should be available to rinse eyes or skin. Provide eye baths and safety showers. Treat symptomatically.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable or combustible.
Hazards from combustion products	The product is non-combustible; however, the packaging material may burn to emit noxious fumes. Contact with metals may liberate hydrogen gas which is extremely flammable.
Suitable Extinguishing media	Use extinguishing media appropriate for surrounding fire.
Precautions for firefighters and special protective clothing	Wear positive pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (including Helmet, Coat, Trousers, Boots and Gloves) or chemical splash suit. DO NOT allow spillage or firefighting water to reach waterways, drains or sewers. Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.
HAZCHEM CODE	2R

Section 6. Accidental Release Measures

General Response Procedures:

Clear area of all unprotected personnel. Allow only trained personnel wearing appropriate protective equipment to be involved in spill response. Contain spill, avoid accidents, clean up immediately. Increase ventilation. Avoid walking through spilled product. Use clean, non-sparking tools and equipment. Shut off all possible sources of ignition. CAUTION: Contact with metals may liberate hydrogen gas which is extremely flammable.

Environmental Precautionary Measures:

Prevent run off into drains and waterways. If contamination of sewers or waterways has occurred advise the Environmental Protection Authority and/or your local Waste Authority.

Clean Up Procedures:

Stop leak if safe to do so. Contain spill immediately. Mechanically collect as much of the spill as possible. Absorb with sand, earth or clay. Transfer to suitable, labelled corrosion resistant containers and dispose of promptly as hazardous waste. Spill on areas other than pavement (e.g. dirt and sand) may be handled by removing the affected soils and placing in approved containers. Dilute acid (preferably acetic acid may be used to neutralise residual traces of caustic soda) after flushing. Dispose as per Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Keep only in original container.
- Do not breathe fumes, vapours or spray.
- Wash hands thoroughly after handling.
- Wear protective clothing as detailed in Section 8.
- Ensure an eye bath is available and ready for use.
- Observe good personal hygiene practices and recommended procedures.
- Avoid contact with eyes, skin and clothing.
- Avoid prolonged or repeated exposure. Do not smoke, eat or drink when handling product.

- When used in its various applications, the product must be prevented from coming into uncontrolled direct contact with other products such as acids and metals.
- Always remove contaminated clothing and wash hands before eating, drinking, smoking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store locked up.
- Store in corrosive resistant container with a resistant inner liner.
- Store upright in the original container in a cool, dry, well-ventilated protected area out of direct sunlight and away foodstuffs.
- Keep containers tightly closed when not in use.
- Inspect regularly for deficiencies such as damage or leaks.
- Do not combine part containers of the same product.
- The floor must be waterproof and anti-slip.
- A water supply or source must be provided in the place of storage.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Sodium hydroxide [1310-73-2]				Ceiling 2

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 13TH EDITION.

Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Adequate ventilation should be provided so that exposure limits are not exceeded.

Personal Protection Equipment



Eyes	Use splash proof safety goggles, and/or if necessary an appropriate full-face shield that conform to AS1336/1337.
Hands	Any Gloves approved for chemical hazards that conform to AS2161.
Skin	Trousers, Long sleeved shirt and closed shoes.
Respiratory	If determined an inhalation risk is present. Use a P2 grade disposable mask which conforms to the requirements of AS1715/1716).

Section 9 Physical and Chemical Properties

Appearance	Free flowing liquid
Colour	Red
Odour	Odourless
Odour Threshold	Not available
pH	12.0 – 13.0
Boiling Point	Not available
Melting Point	Not available

Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Density	1.176 g/ml @ 20°C
Water Solubility	Complete in water
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not available
Shelf life	2 years from manufacturing date (when stored as directed)

Section 10. Stability and Reactivity

Stability of Substance	The substance is stable under normal environmental and foreseeable conditions of temperature and pressure during storage and handling.
Possibility of hazardous reactions	Not available
Conditions to Avoid	Avoid contact with foodstuffs. Do not combine part drums of the same product.
Incompatible Materials	Incompatible with ammonium salts, aluminium, tin, and zinc.
Hazardous Decomposition Products	The packaging material may burn to emit noxious fumes. Contact with metals may liberate hydrogen gas.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Causes severe eye damage. Can cause ulceration of the conjunctiva and cornea. Eye, Rabbit: 40 µg/24hr
Skin	Causes skin burns. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. Irritation data: Skin, Mouse: 500 mg/24hr.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Section 12. Ecotoxicological Information

Product:	
Persistence and degradability	Readily biodegradable. Other relevant information Abiotic

	degradation: NaOH is a strong alkaline substance that dissociates completely in water to Na ⁺ and OH ⁻ . High water solubility and low vapour pressure indicate that NaOH will be found predominantly in aquatic environment. This implies that it will not adsorb on particulate matter or surfaces. Atmospheric emissions as aerosols are rapidly neutralized by carbon dioxide and the salts will be washed out by rain.
Bioaccumulation	Sodium Hydroxide does not bioaccumulate in organism. In addition, sodium is a naturally occurring element that is prevalent in the environment and to which organism are exposed regularly for which they have some capacity to regulate the concentration in the organism.
Mobility	High water solubility and mobility.
Other adverse effects	No data available.

Section 13. Disposal Considerations

Disposal Method:

Dispose of in accordance with all local, regional and national regulations. All empty packaging should be disposed of in accordance with local, regional, and national regulations or recycled/reconditioned at an approved facility.

Precautions or methods to avoid: Containers should be triple rinsed then rinsed with dilute hydrochloric acid to neutralise sodium hydroxide residues which should be added slowly by trained staff wearing proper protection.

Disposal of this product must comply with any requirements of the Resource Management Act for which approval should be sought from the Regional Authority.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012



Road, Rail, Sea and Air Transport

UN No	1824
Class - Primary	8
Packing Group	II
Proper Shipping Name	SODIUM HYDROXIDE SOLUTION
Marine Pollutant	No
Special Provisions	If the product's individual container is below 1L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: Cleaning Products (Corrosive) – HSR002526

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	250L

Tracking Trigger Quantities	Not required
Signage Trigger Quantities	250L
Emergency Response Plan	1000L
Secondary Containment	1000L
Restriction of Use	Only use for the intended purpose.

Section 16 Other Information

Glossary

Cat	Category
EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2020 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This SDS has been prepared from current technical data and summarises at the date of issue our best knowledge of the health and safety information of the product, and how to safely handle and use the product in the work place. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact the company.

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