SAFETY DATA SHEET

C-Tec 2% BLEACH

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	C-Tec 2% Bleach
OTHER NAMES:	Bleach
RECOMMENDED USE:	Sanitising Agent, Water Treatment, Bleach
SUPPLIER NAME:	2CARE PRODUCTS
ADDRESS:	9 Donnor Place Mt Wellington AUCKLAND
Phone:	0800 753 753
Fax:	(09) 574 5999
Emergency Telephone:	0800 764 766 NEW ZEALAND NATIONAL POISON CENTRE

2. HAZARD(S) IDENTIFICATION

GLOBALLY HARMONISED SYSTEM

HAZARD CLASSIFICATION: HAZARDOUS according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

HAZARD CATEGORIES		
	Skin Corrosion/Irritation	Category 2
	Serious Eye Damage/Irritation	Category 1
	Aquatic Toxicity (Acute)	Category 3

PICTOGRAMS: NA

SIGNAL WORD: **WARNING**

HAZARD STATEMENTS:
H316 – Causes mild skin irritation.
H320 – Causes eye irritation.

PRECAUTIONARY STATEMENTS

PREVENTION:
P102 – Keep out of reach of children.
P103 – Read label before use.
P264 – Wash hands thoroughly after handling.

RESPONSE:
P101 – If medical advice is needed, have product container or label at hand.
P305 + P351 + P338 – **IF IN EYES**: Rinse cautiously for several minutes. **REMOVE** contact lenses if present and safe to do so. Continue rinsing.

P332 + P313 – If skin irritation occurs. Get medical advice/attention.
P337 + P313 – if eye irritation persists: Get medical advice/attention.

STORAGE N/A

DISPOSAL P501 - Dispose of this material and its container as hazardous waste, via a licensed facility. See local council for disposal/recycling information.

ENVIRONMENTAL PROTECTION AUTHORITY (NEW ZEALAND)

HSNO CLASSIFICATIONS

Toxicity Hazards	
6.3B	Substances that are irritating to the skin.
6.4A	Substances that are irritating to the eye - (mild irritant)

The information contained in this SDS is specific to the product when handled and used neat. This product when diluted may not require the same control measures as the neat product. Check with your technical representative if in doubt.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Sodium Hypochlorite	NaOCl	7681-52-9	<3%
Water	H_2O	7732-18-5	Balance

4. FIRST AID MEASURES

INGESTION **DO NOT** induce vomiting. If person is conscious give water to rinse out their mouth, then slowly provide as much water as the person can comfortably drink. Transport person to nearest hospital or doctor without delay. If person has lost consciousness **DIAL 111** and request an ambulance.

EYE CONTACT **IMMEDIATELY** flush eyes with copious amounts of water for at least 15 minutes while holding eyelids open. Ensure complete irrigation of the eyes by lifting the upper and lower lids periodically. Removal of contact lenses should only be done by skilled personnel. Transport person to nearest hospital or doctor without delay.

SKIN CONTACT **REMOVE** contaminated clothing. **IMMEDIATELY** flush the contaminated skin thoroughly with water for at least 15 minutes preferably under a safety shower. Transport to hospital or doctor.

INHALATION **REMOVE** victim from source of exposure to fresh air. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing with a demand valve resuscitator, bag-valve mask device, or pocket mask. Perform CPR if necessary.

SAFETY MEASURES Potable water should be available to rinse eyes. Provide eye baths and safety showers. Treat symptomatically.

PHYSICIAN NOTES Treat symptomatically based on judgement of doctor and individual reactions of patient.

5. FIRE FIGHTING METHODS

GENERAL MEASURES	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.
FLAMMABILITY CONDITIONS	Product is not combustible.
EXTINGUISHING MEDIA	Use extinguishing media appropriate for surrounding fire/area.
HAZARDOUS PRODUCTS OF COMBUSTION	The product is non-combustible; however, it may emit poisonous and/or corrosive fumes. The packaging material may also burn to emit noxious fumes.
SPECIAL FIRE FIGHTING INSTRUCTIONS	N/A
PERSONAL PROTECTIVE EQUIPMENT	Wear positive pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (including Helmet, Coat, Trousers, Boots and Gloves or chemical splash suit).
HAZCHEM CODE	No information available.

6. SPILLAGE/ACCIDENTAL RELEASE MEASURES

GENERAL RESPONSE PROCEDURE	Clear area of all unprotected personnel. Allow only trained personnel wearing appropriate protective equipment to be involved in spill response. Contain spill, avoid further accidents, clean up immediately. Increase ventilation. In the case of large spills alert fire brigade and notify them of location and nature of spill.
CLEAN UP PROCEDURES	Mechanically collect as much of the spill as possible. Absorb with sand, earth or clay. Transfer to suitable, labelled 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.
CONTAINMENT	Stop leak if safe to do so. Contain spill immediately.
DECONTAMINATION	Wash area down with water and collect washings for disposal.
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.
PERSONAL PRECAUTIONARY MEASURES	Personnel involved in the clean-up should wear full protective clothing as listed in section 8.
EVACUATION CRITERIA	Evacuate all non-essential personnel.

7. HANDLING AND STORAGE

HANDLING	Use in a well-ventilated area. Ensure an eye bath is available and ready for use. Avoid contact with eyes, skin and clothing. Do not inhale product vapours. Do not smoke, eat or drink when handling product. 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. Prevent fume concentration in hollows and sumps.
STORAGE	Store upright in the original container in a cool, dry, well-ventilated protected area out of direct sunlight and away from 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. A water supply or source must be provided in the place of storage. Emergency eye-washes must be available.
CONTAINER	Store in original packaging as approved by manufacturer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

GENERAL	Sodium Hypochlorite [CAS 7681-52-9].	
EXPOSURE LIMITS	TWA-Ceil. 1ppm (as Cl_2).from ACGIH	
BIOLOGICAL LIMITS	No information available on biological limit values for this product.	
ENGINEERING MEASURES	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 PROTECTIVE EQUIPMENT	RESPIRATOR	If determined an inhalation risk is present. Use a P2 grade valved disposable mask which I suitable for vapour protection and conforms to the requirements of AS1715/1716).
	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.
	CLOTHING	Trousers, Long sleeved shirt and closed shoes.

9. PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL STATE	Liquid
APPEARANCE	Free flowing
COLOUR	Yellow/green
ODOUR	Slight Chlorine
pH	11.0 – 12.0 (100% solution)
DENSITY	1.047g/mL @ 20°C.

VAPOUR PRESSURE	No Data Available.
VAPOUR DENSITY	No Data Available.
BOILING POINT	No Data Available.
FREEZING POINT	No Data Available.
SOLUBILITY	Complete in water.

10. STABILITY AND REACTIVITY

GENERAL INFORMATION	Stable under normal conditions of use.
CHEMICAL STABILITY	Unstable in the presence of incompatible materials may liberate poisonous fumes. The substance is stable under normal environmental and foreseeable conditions during storage and handling.
CONDITIONS TO AVOID	Avoid contact with foodstuffs. Do not combine part drums of the same product. Use in a well-ventilated area.
MATERIALS TO AVOID	Reducing agents, Ammonia based cleaners.
HAZARDOUS DECOMPOSITION PRODUCTS	Excess heat or reaction with acids may produce Chloramines which are toxic and have explosive potential.

11. TOXICOLOGICAL INFORMATION

ORAL	LD_{50} – >237mg/kg (Rat). Ingestion can cause burns to the digestive tract. Symptoms may include: 1. Pain and inflammation of the mouth, pharynx, oesophagus, and stomach. 2. Erosion of mucous membranes (chiefly the stomach), nausea, vomiting, choking, coughing, haemorrhage. 3. Circulatory collapse with cold and clammy skin (due to methemoglobinemia), cyanosis, and shallow respirations. 4. Confusion, delirium, coma. 5. Oedema of the pharynx, glottis, larynx with stridor and obstruction. 6. Perforation of the oesophagus, or stomach, with mediastinitis or peritonitis.
DERMAL	LD_{50} – >10000mg/kg (Rabbit).
INHALATION	No Information available.
EYE	LD50 – 10mg/kg (Rabbit). This material can cause chemical burns, corneal oedema and conjunctivital haemorrhage to the eye. It's vapour may be extremely irritating.
CARCINOGENICITY	No information available.
MUTAGENICITY	No information available.
REPRODUCTIVE	No information available.
TARGET ORGAN	No information available.
LONG TERM	Asthma-like symptoms may continue for months or even years after exposure ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome which can occur following exposure to high levels of highly irritating compounds. Key criteria for the diagnosis include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant

12. ECOLOGICAL INFORMATION

ECOTOXICITY	This material is **ECOTOXIC** in the aquatic environment. No specific information available.
PERSISTENCE / DEGRADABILITY	No information available.
MOBILITY	No information available.
ENVIRONMENTAL FATE	Do not allow drainage into sewer, streams or storm water systems.
BIOACCUMULATION POTENTIAL	No information available.
ENVIRONMENTAL IMPACT	No information available.

13. DISPOSAL CONSIDERATIONS

GENERAL INFORMATION	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.
SPECIAL PRECAUTIONS FOR LANDFILL	Containers should be rinsed then disposed of in compliance with any requirements of the Resource Management Act for which approval should be sought from the Regional Authority.

14. TRANSPORT INFORMATION

LAND TRANSPORT NEW ZEALAND (NZS5433)
Not classified as a Dangerous Good by NZS5433:2012 for transport by Road and Rail

PROPER SHIPPING NAME	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS.
UN NUMBER	No Data Available
CLASS	No Data Available
SUBSIDIARY RISK	No Data Available
PACKAGING GROUP	No Data Available
HAZCHEM	No Data Available
SPECIAL PROVISIONS	No Data Available

SEA TRANSPORT (IMDG)
Not classified as a Dangerous Good by the International Maritime Dangerous Good Code (IMDG) for transport by sea.

PROPER SHIPPING NAME	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
UN NUMBER	No Data Available
CLASS	No Data Available
SUBSIDIARY RISK	No Data Available
PACKAGING GROUP	No Data Available
HAZCHEM	No Data Available
EMS	No Data Available
MARINE POLLUTANT	Not Listed
SPECIAL PROVISIONS	No Data Available

AIR TRANSPORT (IATA)
Not classified as a Dangerous Good by the international Air Transport Association (IATA) for transport by air

PROPER SHIPPING NAME	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
UN NUMBER	No Data Available
CLASS	No Data Available
SUBSIDIARY RISK	No Data Available
PACKAGING GROUP	No Data Available
HAZCHEM	No Data Available
EPG	No Data Available
SPECIAL PROVISIONS	No Data Available

15. REGULATORY INFORMATION

ENVIRONMENTAL PROTECTION AUTHORITY (NEW ZEALAND)
Hazardous Substances & New Organisms Act 1996

APPROVAL CODE	HSR002530 – Cleaning Products (Subsidiary Hazard) Group Standard)
HSNO CLASSIFICATIONS	6.3A, 6.4A
APPROVED HANDLER	Not Required
NZIOC	Listed

16. OTHER INFORMATION

ISSUE DATE 28th April 2021
In any event the review and if necessary, re-issue of an SDS shall be no longer than 5 years after the last date of issue

KEY/LEGEND		
	AS1336/1337	Industrial Eye Protection – Metric Units (Standards Australia).
	AS1715/1716	Respiratory Protection Devices – Metric Units (Standards Australia).
	AS2161	Industrial Safety Gloves and Mittens (Standards Australia).
	CAS	Chemical Abstracts Service.
	EC_{50}	Concentration which induces a response halfway between the baseline and maximum.
	EMS	IMDG Emergency Schedule.
	EPG	Emergency Procedures Guide.
	GHS	Globally Harmonised System.
	HSNO	Hazardous Substances and New Organisms.
	IMDG	International Maritime Dangerous Goods.
	LC_{50}	Concentration required to kill half the members of a tested population after a specified duration.
	LD_{50}	Dosage required to kill half the members of a tested population after a specified duration.
	NOEC	No Observed Effect Concentration
	NZIOC	New Zealand Inventory of Chemicals
	SDS	Safety Data Sheet
	UN No.	UN Nations Number
	WES-Ceiling	Concentration that should not be exceeded at any time during any part of the working day

REFERENCES

ACGIH - American Conference of Governmental Industrial Hygienists
Workplace Exposure Standards-and Biological Exposure Indices – WorkSafe New Zealand
TOXNET – ChemIDPlus Database
IMDG Appendix B List of Marine Pollutants
IMDG Emergency Fire and Spill Codes
UN Recommendations on the Transport of Dangerous Goods Volume 1 (17th Edition) Part 3

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 in particular 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.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.

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