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 Triclean**
Other Names:	C-Tec Triclean
Product Use:	Machine Warewash Detergent & Glasswash
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:	16 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 (subsidiary) – HSR002530

Pictograms:

Signal Word: **DANGER**

GHS Classification and Category	HSNO Classification	Hazard Code	Hazard Statement
Skin irritation Cat. 2	6.3A	H315	Causes skin irritation.
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.
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.

P362	Take off contaminated clothing and wash before re-use.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.

Storage Code	**Storage Statement**
None allocated	

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.**
Tris(2-Hydroxyethyl) Amine	< 10%	102-71-6
2-Phosphonobutane-1,2,4-tricarboxylic acid	< 5%	37971-36-1
Non-Hazardous ingredients	<25%	
Water	Balance	7732-18-5

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes — IMMEDIATELY flush eyes with copious amounts of water for at least 20 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 IMMEDIATELY.

If on Skin — REMOVE contaminated clothing. IMMEDIATELY flush the contaminated skin thoroughly with water for at least 15 minutes preferably under a safety shower. If skin irritation occurs: Get medical advice/ attention.

If Swallowed — Do not induce vomiting. Rinse mouth. 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 irritation.
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.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from combustion products	The product is non-combustible; however, the packaging material may burn to emit noxious fumes.
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). 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	**None allocated**

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 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. Evacuate all non-essential personnel.

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 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. Wash area down with water and collect washings for disposal. Dispose as per Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Wash hands thoroughly after handling.
- Wear protective clothing as detailed in Section 8.
- Use in well ventilated area.
- 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.
- 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.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.

- Store upright in the original container in a cool, dry, well-ventilated protected area out of direct sunlight and 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 showers and eye-washes must be available.
- Store in original packaging as approved by manufacturer.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance		TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³
Triethanolamine	[102-71-6]	-	5	-	-

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

General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in special circumstances.

Personal Protection Equipment

Eyes	Use splash proof safety goggles 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	Not required.

Section 9 Physical and Chemical Properties

Appearance	Free flowing Liquid
Colour	Clear
Odour	Amine
Odour Threshold	Not available
pH	8.5 – 9.5
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
Specific Gravity	Not available
Water Solubility	Complete in water
Partition Coefficient:	Not available
Auto-ignition	Not available

Temperature	
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	No data available.
Conditions to Avoid	Avoid contact with foodstuffs. Do not combine part drums of the same product.
Incompatible Materials	Strong acids.
Hazardous Decomposition Products	The packaging material may burn to emit noxious fumes.

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.
Skin	Causes skin irritation.

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.

Individual component information:

Acute Toxicity:

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
Tris(2-Hydroxyethyl) Amine	6400 mg/kg (rat)	-	-

Section 12. Ecotoxicological Information

Product:	
Persistence and degradability	Readily Biodegradable.
Bioaccumulation	Low risk of bioaccumulation.
Mobility	High water solubility and mobility.
Other adverse effects	No data available.

ECOTOXICITY	Tris(2-Hydroxyethyl)	LC_{50} (Fish, 96h) 11800 mg/L (Pimephales promelas) (APHA method 1980)

Amine	EC_{50} (Crustacea, 48h) 609.88 mg/L (Ceriodaphnia dubia) (ASTM 1192) LC_{50} (Algae, 72h) 512 mg/L (Scenedesmus subspicatus) (DIN 38412 Part 9)
2-Phosphonobutane-1,2,4-tricarboxylic acid	LC_0 (Fish, 24h) >1 000mg/L (Oncorhynchus mykiss) EC_0 (Crustacea, 24h) >300mg/L (Daphnia magna) EC_0 (Algae, 24h) 1300mg/L (Desmodesmus subspicatus)

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 rinsed and disposed of in line 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 NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

Section 15 Regulatory Information

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

EPA Approval Code: Cleaning Products (subsidiary) – HSR002530

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000L
Emergency Response Plan	10 000L
Secondary Containment	10 000L
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.

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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