



## 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 Scalex**  
Other Names: C-Tec Scalex Descaler  
Product Use: Acidic Based Descaler Cleaner  
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 (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 dust, fumes, gas, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
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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.
Phosphoric Acid	<50%	7664-38-2
Glycolic Acid	<10%	79-14-1
Non Hazardous ingredients	<5%	Proprietary
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. 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

<b>Hazard Type</b>	Non Flammable
<b>Hazards from combustion products</b>	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.
<b>Suitable Extinguishing media</b>	Use extinguishing media appropriate for surrounding fire.
<b>Precautions for firefighters and special protective clothing</b>	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing (includes fire-fighting helmet, coat, trousers, boots and gloves) or chemical splash suit. Please note: Structural fire fighters protective clothing is recommended for fire situations only, it is not effective in spills. 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. DO NOT allow firefighting water to reach waterways, drains or sewers.
<b>HAZCHEM CODE</b>	<b>2R</b>

## 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 as it is slippery when spilt. **CAUTION:** Prolonged 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 dust, fumes, gas, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Wear protective clothing as detailed in Section 8.
- Use in a well-ventilated area.
- Ensure an eye bath and safety shower 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 after handling or 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 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.
- Store in original packaging as approved by manufacturer.
- Do not store in Aluminium or galvanised containers nor use die cast zinc or aluminium fittings (e.g. valves and bungs.).

**Section 8 Exposure Controls / Personal Protection**

**WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

Substance	TWA ppm	mg/m <sup>3</sup>	STEL	
			ppm	mg/m <sup>3</sup>
Phosphoric acid [7664-38-2]	-	1	-	-

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 13<sup>TH</sup> 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**



<b>Eyes</b>	Use splash proof safety goggles, and/or if necessary an appropriate full-face shield that conform to AS1336/1337.
<b>Hands</b>	Any Gloves approved for chemical hazards that conform to AS2161.
<b>Skin</b>	Trousers, Long sleeved shirt and closed shoes.
<b>Respiratory</b>	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**

<b>Appearance</b>	Free Flowing Liquid
<b>Colour</b>	Colourless
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH</b>	1.0 – 2.0
<b>Boiling Point</b>	Not available

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<b>Melting Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	Not available
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Specific Gravity</b>	Not available
<b>Water Solubility</b>	Complete in water
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Kinematic Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not available
<b>Shelf life</b>	2 years from manufacturing date (when stored as directed)

### Section 10. Stability and Reactivity

<b>Stability of Substance</b>	The substance is stable under normal environmental and foreseeable conditions of temperature and pressure during storage and handling.
<b>Possibility of hazardous reactions</b>	No data available.
<b>Conditions to Avoid</b>	Avoid contact with foodstuffs. Do not combine part drums of the same product.
<b>Incompatible Materials</b>	Oxidising agents, reducing agents, strong alkalis, sulphur trioxide, metals and sources of ignition.
<b>Hazardous Decomposition Products</b>	This product will release hydrogen on contact with metals, which may cause explosion in the air. Emits toxic fumes under fire conditions. It will produce the virulent gas phosphorus at a high temperature. It is corrosive. Hazardous decomposition products may include Phosphine, oxides of phosphorus, and hydrogen gas.

### Section 11 Toxicological Information

#### Acute Effects:

<b>Swallowed</b>	Not applicable.
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Not applicable.
<b>Eye</b>	Causes severe eye damage. Causes tissue destruction, permanent damage to the cornea, blindness.
<b>Skin</b>	Causes skin burns.

#### Chronic Effects:

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

## Individual component information:

### Acute Toxicity:

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
Phosphoric Acid	1530 mg/kg (rat)	2740 mg/kg (rabbit)	-
2-Hydroxyethanoic Acid	2030 mg/kg (rat)	-	3.6 mg/L (rat)

## Section 12. Ecotoxicological Information

<b>Product:</b>	
<b>Persistence and degradability</b>	Readily Biodegradable.
<b>Bioaccumulation</b>	Phosphate (formed when phosphoric acid is dissolved) is unlikely to bioaccumulate in most aquatic species.
<b>Mobility</b>	When spilled onto soil, phosphoric acid will infiltrate downward, the rate being greater with lower concentration because of reduced viscosity. During transport through the soil, phosphoric acid will dissolve some of the soil material carbonate-based materials. The acid will be neutralized to some degree with adsorption of the proton and phosphate ions also possible. However, significant amounts of acid will remain for transport. If reaching the groundwater table, the acid will continue to move in the direction of groundwater flow. A contaminated plume will be produced with dilution and dispersion serving to reduce the acid concentration.
<b>Other adverse effects</b>	Neither silica nor sodium will appreciably bioconcentrate up the food chain.

ECOTOXICITY      Phosphoric Acid      LC<sub>50</sub> (Fish, 96 h): 87ppm (Rainbow Trout)  
2-      LC<sub>50</sub> (Fish, 96 h): 164 mg/L (Peepholes promelas)  
Hydroxyethanoic      EC<sub>50</sub> (Crustacea, 48h): 141 mg/L (Daphnia magna)  
Acid      ErC<sub>50</sub> (Algae, 72h): 44 mg/L (Pseudokirchineriella  
subcapitata)

All data from NZ Chemical Classification and Information Database.  
Aquatic Fate: While acidity may be reduced readily by natural water hardness minerals, the phosphate may persist indefinitely.  
Avoid contaminating waterways.

## 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/potassium 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

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<b>UN No</b>	1805
<b>Class - Primary</b>	8
<b>Packing Group</b>	II
<b>Proper Shipping Name</b>	PHOSPHORIC ACID SOLUTION.
<b>Marine Pollutant</b>	No
<b>Special Provisions</b>	If the product's individual container is below 5L, 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

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<b>HSW (HS) Regulations 2017 and EPA Notices</b>	<b>Trigger Quantity</b>
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 <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	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 April 2022 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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