

### **C-Tec Gel Stain Remover**

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** C-Tec Gel Stain Remover OTHER NAMES: C-Tec Gel Stain Remover RECOMMENDED USE: Sanitising Agent, Water Treatment, Bleach 2CARE PRODUCTS SUPPLIER NAME: ADDRESS: 9 Donnor Place Mt Wellington AUCKLAND 0800 753 753 Phone: 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 Glob- Labelling of Chemicals (GHS).	ally Harmonised System of Classification and
HAZARD CATEGORIES	Corrosive to Metals Skin Corrosion/Irritation Serious Eye Damage/Irritation Aquatic Toxicity (Acute)	Category 1 Category 1C Category 1 Category 2
PICTOGRAMS		
SIGNAL WORD	DANGER	
HAZARD STATEMENTS	H290 – May be corrosive to metals. H314 – Causes severe skin burns and eye damage. H318 – Causes serious eye damage. H412 – Harmful to aquatic life with long lasting.effects.	

### PRECAUTIONARY STATEMENTS

PREVENTION P102 – Keep out of reach of children.		
	P103 – Read label before use.	
	P104 – Read Safety Data Sheet before use.	
	P234 – Keep only in original container.	
	P260 – Do not breathe fumes.	
	P264 – Wash hands thoroughly after handling.	
	P273 – Avoid release to the environment.	
	P280 – Wear protective gloves, clothing and eye/face protection.	
RESPONSE	P101 – If medical advice is needed, have product container or label at hand.	
	P310 – Immediately call NZ POISON CENTRE or doctor/physician.	
	P321 – WASH affected areas well with water.	
	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: 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 for several minutes. REMOVE contact lenses if	
	present and safe to do so. Continue rinsing.	
STORAGE	P405 – Store locked up.	
	P406 – Store in corrosive resistant polypropylene container with a resistant inner liner.	
DISPOSAL	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.	
ENVIRONMENTAL PROTECTION AUTHORITY (NEW ZEALAND)		
HSNO CLASSIFICATIONS	Toxicity Hazards	
	8.1A Substances that are corrosive to metals.	
	8.2C Substances that are corrosive to dermal tissue UN PGIII.	
	8.3A Substances that are corrosive to ocular tissue.	
	Environmental Hazards	
	9.1C Substances that are harmful in the aquatic environment.	

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	NaOCI	7681-52-9	< 40%
Sodium Hydroxide	NaOH	1310-73-2	< 5%
Myristyl Dimethyl Amine Oxide	C <sub>16</sub> H <sub>35</sub> NO	3332-27-2	< 5%
Water	H <sub>2</sub> O	7732-18-5	Balance

#### 4. FIRST AID MEASURES

INGESTION	<b>DO NOT</b> 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 to nearest hospital or doctor without delay. If person has lost consciousness <b>DIAL 111</b> and request an ambulance.
EYE CONTACT	<b>IMMEDIATELY</b> 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. 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. Seek immediate medical attention. An Ophthalmology consultation is a must. Transport to nearest hospital or doctor without delay.
SKIN CONTACT	<b>REMOVE</b> contaminated clothing. <b>IMMEDIATELY</b> flush the contaminated skin thoroughly with water for at least 15 minutes. Seek medical attention <b>URGENTLY</b> if burning or irritation persists.
INHALATION	<b>REMOVE</b> victim from source of exposure to fresh air. Allow patient to assume most comfortable position and keep warm. Keep at rest until 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. Contact with metals may liberate hydrogen gas which is extremely flammable.
SPECIAL FIRE FIGHTING	<b>DO NOT</b> allow spillage or firefighting water to reach waterways, drains or sewers.
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	2W.

#### 6. SPILLAGE/ACCIDENTAL RELEASE MEASURES

GENERAL RESPONSEClear area of all unprotected personnel. Allow only trained personnel wearing appropriatePROCEDUREprotective equipment to be involved in spill response. Contain spill, avoid further accidents, clean<br/>up immediately. Increase ventilation. In the case of large spills alert fire brigade and notify them of<br/>location and nature of spill.

**CAUTION:** Contact with metals may liberate hydrogen gas which is extremely flammable.

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	Dilute acid (preferably acetic acid may be used to neutralise residual traces of caustic soda) after flushing.
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.
EVACUATION CRITERIA	Evacuate all non-essential personnel.
PERSONAL PRECAUTIONARY MEASURES	Personnel involved in the clean-up should wear full protective clothing as listed in section 8.

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. The product must be prevented from coming into uncontrolled direct contact with other products such as acids and metals 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. Do not store in Aluminium or galvanised	

containers nor use die cast zinc or aluminium fittings (e.g. valves and bungs.)

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- GENERAL Sodium Hypochlorite [CAS 7681-52-9]. Sodium Hydroxide [CAS 1310-73-2].
- EXPOSURE LIMITS TWA-Ceil. 1ppm (as Cl<sub>2</sub>).from ACGIH WES-Ceil. 2mg/m<sup>3</sup> from WorkSafe New Zealand.

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	Viscous
COLOUR	White
ODOUR	Chlorine
рН	13.0 - 14.0
DENSITY	No Data Available.
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	Corrosive liquid.
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	Acids, reducing agents, ammonia based cleaners, 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. Excess heat or reaction with acids may produce Chloramines which are toxic and have explosive potential.

### 11. TOXICOLOGICAL INFORMATION

ORAL	<ul> <li>Sodium Hypochlorite – LD<sub>50</sub> – &gt;237mg/kg (Rat).</li> <li>Sodium Hydroxide – LD<sub>LO</sub> – 500mg/kg (Rabbit).</li> <li>Myristyl Dimethyl Amine Oxide – 1667mg/kg (Toxicity estimate by calculation – From manufacturer).</li> <li>Ingestion can cause burns to the digestive tract. Symptoms may include: <ol> <li>Pain and inflammation of the mouth, pharynx, oesophagus, and stomach.</li> <li>Erosion of the mucous membranes (chiefly of the stomach), nausea, vomiting, choking, coughing, haemorrhage.</li> <li>Circulatory collapse with cold and clammy skin (due to methemoglobinemia), cyanosis, and shallow respirations.</li> <li>Confusion, delirium, coma.</li> <li>Oedema of the pharynx, glottis, larynx with stridor and obstruction.</li> <li>Perforation of the oesophagus, or stomach, with mediastinitis or peritonitis.</li> </ol> </li> </ul>
DERMAL	Sodium Hypochlorite – $LD_{50}$ – >10000mg/kg (Rabbit). Sodium Hydroxide – $LD_{50}$ – 1350mg/kg (Rabbit). Myristyl Dimethyl Amine Oxide – $LD_{50}$ – >2000mg/kg (Rat). Causes severe skin burns. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection.
INHALATION	No Information available.
EYE	Sodium Hypochlorite – $LD_{50}$ – 10mg/kg (Rabbit). Sodium Hydroxide – $LD_{50}$ - 40µg/24hr (Rabbit). This material can cause chemical burns, corneal oedema and conjunctivital haemorrhage to the eye. It's vapour may be extremely irritating.
CARCINOGENICITY	Sodium Hydroxide – Systemic carcinogenicity is not expected to occur because the substance is not expected to be systemically available in the body under normal handling and use conditions. Myristyl Dimethyl Amine Oxide – 2000mg/kg dosage per day for 24 months in Rats showed a definite negative result.
MUTAGENICITY	Sodium Hydroxide – Both the in vitro and the in vivo genetic toxicity tests indicated no evidence of mutagenic activity. Myristyl Dimethyl Amine Oxide – Testing carried out in line with OECD Test Guideline 471 showed no evidence of mutagenic activity.
REPRODUCTIVE	Sodium Hydroxide - The substance is not expected to be systemically available in the body under normal handling and use conditions. Myristyl Dimethyl Amine Oxide – Testing on maternal rats with a dosage of 25mg/kg in line with OECD Test Guideline 422 showed no adverse effects.
TARGET ORGAN	No information available.
LONG TERM	Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS 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 <b>ECOTOXIC</b> in the Sodium Hydroxide Myristyl Dimethyl Amine Oxide	EC <sub>50</sub> – 40.4mg/L (Ceriodaphnia). LC <sub>50</sub> – 2.4mg/L (Brachidanio rerio – 96hr). LC <sub>50</sub> – 2.64mg/L (Daphnia magna – 48hr). ErC <sub>50</sub> – 0.19mg/L (Selenastrum capricornutum – 72hr).	
		NOEC – 0.42mg/L (Pimephales promelas – 302 days). NOEC – 0.7mg/L (Daphnia magna – 21 days).	
PERSISTENCE / DEGRADABILITY	Readily Biodegradable. Other relevant information Abiotic degradation: NaOH is a strong alkaline substance that dissociates completely in water to Na <sup>+</sup> and OH <sup>-</sup> . 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.		
MOBILITY	High water solubility and mobility.		
ENVIRONMENTAL FATE	Do not allow drainage into sewer, streams or storm water systems.		
BIOACCUMULATION POTENTIAL	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.		
ENVIRONMENTAL IMPACT	No information available.		

#### 13. DISPOSAL CONSIDERATIONS

GENERAL INFORMATIONDispose of in accordance with all local, regional and national regulations. All empty packaging should<br/>be disposed of in accordance with local, regional, and national regulations or recycled/reconditioned<br/>at an approved facility.SPECIAL PRECAUTIONS<br/>FOR LANDFILLContainers should be triple rinsed then rinsed with dilute hydrochloric acid to neutralise sodium<br/>hydroxide residues which should be added slowly by trained staff wearing proper protection.<br/>Disposal of this product must comply with any requirements of the Resource Management Act for<br/>which approval should be sought from the Regional Authority.

#### 14. TRANSPORT INFORMATION

#### LAND TRANSPORT NEW ZEALAND (NZS5433)

PROPER SHIPPING NAME	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Contains Sodium hydroxide)
UN NUMBER	3266
CLASS	8 – Corrosive Substances
SUBSIDIARY RISK	No Data Available
PACKAGING GROUP	III
HAZCHEM	2W
SPECIAL PROVISIONS	No Data Available

#### SEA TRANSPORT (IMDG)

PROPER SHIPPING NAME UN NUMBER	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Contains Sodium hydroxide) 3266				
CLASS	8 – Corrosive Substances				
SUBSIDIARY RISK	No Data Available				
PACKAGING GROUP	lii				
HAZCHEM	2W				
EMS	F-A, S-B				
MARINE POLLUTANT	Not Listed				
SPECIAL PROVISIONS	No Data Available				
	AIR TRANSPORT (IATA)				

PROPER SHIPPING NAME UN NUMBER	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Contains Sodium hydroxide) 3266
CLASS	8 – Corrosive Substances
SUBSIDIARY RISK	No Data Available
PACKAGING GROUP	III
HAZCHEM	2W
SPECIAL PROVISIONS	No Data Available

#### 15. **REGULATORY INFORMATION**

#### ENVIRONMENTAL PROTECTION AUTHORITY (NEW ZEALAND)

Hazardous Substances & New Organisms Act 1996

APPROVAL CODE	HSR002526 – Cleaning Products (Corrosive) Group Standard 2006
HSNO CLASSIFICATIONS	8.1A, 8.2C, 8.3A, 9.1C
APPROVED HANDLER	Not Required
NZIOC	Listed

#### 16. OTHER INFORMATION

REVISION NUMBER2 - New IssueISSUE DATE22<sup>nd</sup> September 2017In 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 AS1715/1716 AS2161 CAS EC <sub>50</sub>	Industrial Eye Protection – Metric Units (Standards Australia). Respiratory Protection Devices – Metric Units (Standards Australia). Industrial Safety Gloves and Mittens (Standards Australia). Chemical Abstracts Service. 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 <sub>50</sub>	Concentration required to kill half the members of a tested population after a specified duration.
	LD <sub>50</sub>	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

UN	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 - Ameri	ACGIH - American Conference of Governmental Industrial Hygienists			
	Workplace Exp	Workplace Exposure Standards-and Biological Exposure Indices – WorkSafe New Zealand			
	TOXNET – Che	TOXNET – ChemIDPlus Database			
	IMDG Append	IMDG Appendix B List of Marine Pollutants			
	IMDG Emergency Fire and Spill Codes				
	UN Recommer	ndations on the Transport of Dangerous Goods Volume 1 (17 <sup>th</sup> 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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