

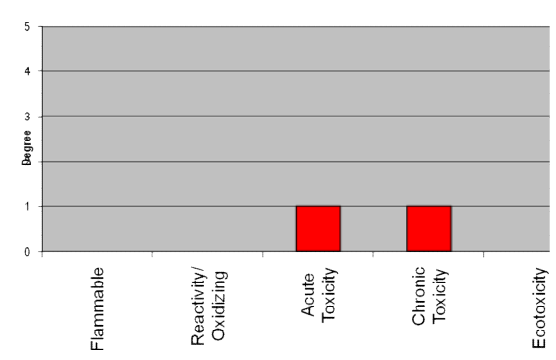

**1. Identification of Substance and Company**

Product Name:	Chux Cleaning Stainless Steel Wipes
Other Names:	Not applicable
HSNO Approval:	Cleaning Products (Subsidiary Hazard) Group Standard 2006, HSR002530
Product Code:	CSSW50/8
UN Number:	Not assigned.
Packaging group:	Not assigned.
Hazchem Code:	1[T] (recommended)
Uses:	Functions as a cleaning aid to wipe up mess and provide shine for stainless steel surfaces like kitchen counter tops.

**Company Details**

Company:	Clorox New Zealand Ltd
Address:	Level 8, Building 5 Central Park 660-670 Great South Road Penrose, Auckland
Telephone Number:	0800 108 858
Emergency Telephone Number:	Poisons and Hazardous Chemicals National Information Centre. Urgent information: 0800 764 766. Working hours: 03 479 7248.

**2. Hazard Identification**
**Hazard Classifications**

<p>This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval Cleaning Products (Subsidiary Hazard) Group Standard 2006, HSR002530), and is classified as follows:</p>	<p>Degree of Hazard:</p>  <table border="1" style="display: none;"> <caption>Degree of Hazard Data</caption> <thead> <tr> <th>Category</th> <th>Degree</th> </tr> </thead> <tbody> <tr> <td>Flammable</td> <td>0</td> </tr> <tr> <td>Reactivity/Oxidizing</td> <td>0</td> </tr> <tr> <td>Acute Toxicity</td> <td>1</td> </tr> <tr> <td>Chronic Toxicity</td> <td>1</td> </tr> <tr> <td>Ecotoxicity</td> <td>0</td> </tr> </tbody> </table>	Category	Degree	Flammable	0	Reactivity/Oxidizing	0	Acute Toxicity	1	Chronic Toxicity	1	Ecotoxicity	0
Category	Degree												
Flammable	0												
Reactivity/Oxidizing	0												
Acute Toxicity	1												
Chronic Toxicity	1												
Ecotoxicity	0												
<p>Classes: 6.1E (oral), 6.3B, 6.4A</p>													
<p>Symbols:</p> 													

**Other Classifications**

Not applicable.

**Hazard and Precautionary Phrases**

Hazard:	May be harmful if swallowed Causes mild skin irritation. Causes eye irritation.
Precautionary	Keep out of reach of children. Read label before use. Wear protective gloves. Contaminated work clothing should not be allowed out of the workplace.  <i>Note: this product contains d-limonene in a bound form. It may cause skin sensitisation if it is mixed with water, other chemicals or the wipes are allowed to dry out.</i>  Further precautionary statements can be found in Section 4 – First Aid.

**3. Composition / Information on Ingredients**

Components of the solution	CAS/ Identification	Class for ingredient(s)	Conc (%)
Iso fatty acid ester	Proprietary	6.1E (oral), 6.3B, 6.4A	>90%
D-Limonene	5989-27-5	3.1C, 6.1E (oral), 6.3B, 6.4A, 6.5B, 9.1A (crustacean, fish), 9.2B	<5%
Preservative	Proprietary	Mixture	0.2%

Wipes are made of inert material

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.  
\*Full ingredient information was made available to independent party (Datachem). Hazardous properties for all ingredients were reviewed with classifications assessed in accordance with New Zealand HSNO/GHS requirements.

4. First Aid			
<i>General Information</i>			
You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).			
Recommended first aid facilities:		Ready access to running water is required. Accessible eyewash is recommended.	
<i>Exposure</i>			
Swallowed:	If medical advice is needed, have product container or label at hand. Call a POISON CENTRE or doctor/physician if you feel unwell.		
Eye contact:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice.		
Skin contact:	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.		
Inhaled:	Generally, inhalation of fumes is unlikely to result in adverse health effects.		
<i>Advice to Doctor</i>			
No significant risk factors have been identified for this product.			
5. Firefighting Measures			
Fire and Explosion Hazards:	There are no specific risks for fire/explosion for this chemical. It is non-flammable.		
Suitable Extinguishing Substances:	Carbon dioxide, extinguishing powder, foam, fog sprays, water jets.		
Unsuitable Extinguishing Substances:	Unknown.		
Protective Equipment:	No special measures are required.		
Danger caused by material, its combustion products or gases produced:	Only small amounts of decomposition products are expected from this product at temperatures normally achieved in fires. This will only occur after heating to dryness. Fire decomposition products from this product are likely to be irritating.		
Hazchem Code:	1[T] (recommended, no Hazchem signage is required)		
6. Accidental Release Measures			
Containment:	If greater than 1000kg is stored, secondary containment and emergency plans to manage any potential spills must be in place.		
Emergency procedures:	If a significant spill occurs: collect spill – see below; transfer to container for disposal. Dispose of according to guidelines below (Section 13).		
Clean-up method:	The product is a solid and therefore can be collected mechanically (e.g. by using a shovel). Small spills do not require any special clean up method.		
Disposal:	Collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.		
Precautions:	No special protective clothing is normally necessary.		
7. Storage and Handling			
Storage:	Avoid storage of harmful substances with food. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10.		
Handling:	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements.		
8. Exposure Controls / Personal Protective Equipment			
<i>Workplace Exposure Standards</i>			
A workplace exposure standard (WES) has not been established by the NZ Department of Labour for this product. There is a general limit of 10mg/m <sup>3</sup> for dusts and mists when limits have not otherwise been established.			
NZ Workplace Exposure Standards (OSH 2002):	Ingredient	WES-TWA	WES-STEL
	Iso fatty acid ester	Data unavailable	Data unavailable
	D-Limonene	Data unavailable	Data unavailable
	Preservative	Data unavailable	Data unavailable
<i>Engineering Controls</i>			
In industrial situations, concentration values below the WES value must be maintained. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.			

<i>Personal Protective Equipment</i>	
Eyes:	Protective eyewear is not normally necessary when using this product, as splashes are unlikely (wipes). Avoid direct contact with the eye.
Skin:	Protective gloves, e.g. nitrile gloves are recommended for sensitive skin. It is prudent to wear gloves when handling chemicals in bulk or for an extended period of time.
Respiratory:	Respirator is not required under normal use. Ensure adequate natural ventilation.
<i>WES Additional Information</i>	
Not applicable.	
<b>9. Physical and Chemical Properties</b>	
Appearance:	Colourless liquid soaked into a porous chux cleaning wipe.
Odour:	Lemon.
pH:	Not applicable
Vapour Pressure:	No data
Boiling Point:	No data
Volatile Materials:	No data available.
Softening/Melting Point:	Not applicable
Solubility:	Liquid is insoluble in water.
Viscosity:	19-22 mPa.s
Specific Gravity or Density:	~ 0.85g/ml at 20°C for the solution.
Flash Point:	Not flammable.
Auto-Ignition Temperature:	Not flammable.
Upper and Lower Flammable Limits:	Not flammable.
Corrosiveness:	Non corrosive.
<b>10. Stability and Reactivity</b>	
Stability:	This product is unlikely to react or decompose under normal storage conditions. This product will not undergo polymerisation reactions.
Conditions to be Avoided:	Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.
Incompatible Materials:	None known.
Hazardous Decomposition Products:	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen, and under some circumstances, oxides of nitrogen. Water.
Hazardous Reactions:	Not applicable.
<b>11. Toxicological Information</b>	
<i>Summary</i>	
Limited data available on the mixture. Where available, toxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following toxicity:	
<i>Supporting Data</i>	
Acute:	Oral: Using LD <sub>50</sub> 's for ingredients, the calculated LD <sub>50</sub> (oral, rat) for the mixture is between 2000 and 5,000 mg/kg. Data considered includes: Iso fatty acid ester: 2000mg/kg, D-Limonene: 4400mg/kg (rat)
	Dermal: No evidence of dermal toxicity for any of the ingredients. The estimated LD <sub>50</sub> (dermal, rat) for the mixture is >2,000 mg/kg.
	Inhaled: No evidence of inhalation toxicity for any of the ingredients. Using LC <sub>50</sub> 's for ingredients, the estimated LC <sub>50</sub> (inhalation, rat) for the mixture is >5,000 ppm.
	Eye: The iso fatty acid ester is a mild eye irritant.
	Skin: The iso fatty acid ester is a mild skin irritant.
Chronic:	Sensitisation: This product contains D-Limonene. D-Limonene is not considered to be sensitising, but after prolonged exposure to air oxidised D-limonene may beformed. These autoxidation products of D-Limonene have been shown in several studies to be skin sensitisers.
	Mutagenicity: Limited data available on the mixture. No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity: Limited data available on the mixture. No ingredient present at concentrations > 0.1% is considered a carcinogen.
	Reproductive / Developmental: Limited data available on the mixture. No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.
	Systemic: Limited data available on the mixture. No ingredient present at concentrations > 1% is considered a target organ toxicant.
	Aggravation of Existing Conditions: Not applicable.

12. Ecological Data			
<i>Summary</i>			
Limited data available on the mixture. Where available, ecotoxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following ecotoxicity groups:			
<i>Supporting Data</i>			
Aquatic:	Using EC <sub>50</sub> 's for ingredients, the estimated EC <sub>50</sub> for the mixture is > 100 mg/L and none of the components are considered bioaccumulative or persistent in the aquatic environment.		
Bioaccumulation:	Limited data available on the mixture.		
Degradability:	Limited data available on the mixture.		
Soil:	Limited data available on the mixture. ERMA has not classified the mixture as ecotoxic in the soil environment. The soil toxicity value for the mixture is ≥ 100 mg/kg.		
Terrestrial vertebrate:	Limited data available on the mixture. ERMA has not classified the mixture as ecotoxic to terrestrial vertebrates. Using LD <sub>50</sub> 's for ingredients, the calculated LD <sub>50</sub> (oral, rat) for the mixture is >5,000 mg/kg. Data considered includes: non hazardous solvent >5000 mg/kg, non hazardous ingredients 300-2000mg/kg, water >5000 mg/kg.		
Terrestrial invertebrate:	Limited data available on the mixture. ERMA has not classified the mixture as ecotoxic to terrestrial invertebrates. The estimated invertebrate ecotoxicity value for the mixture is > 25 µg/bee.		
Biocidal:	Not designed as a biocide.		
<i>Environmental effect levels:</i>	<i>Ingredients</i>	<i>EEL</i>	
	Iso fatty acid ester	Data unavailable	
	D-Limonene	Data unavailable	
	Preservative	Data unavailable	
13. Disposal Considerations			
Restrictions:	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.		
Disposal Method:	Dispose of residue and solutions that cannot be reused to sewer. If this is not possible dilute with water (at least 5 times as much water) and drain.		
Contaminated Packaging:	Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.		
14. Transport Information			
Transport according to NZS 5433 (Transport of Hazardous Substances on Land). There are no specific restrictions for this product (not a dangerous good).			
UN Number:	Not assigned.	Proper Shipping Name:	Not applicable.
Class(es):	Not applicable.	Packing Group:	Not assigned.
Precautions:	none	HAZCHEM Code:	1[T] (recommended)
15. Regulatory Information			
This product has been transferred to HSNO (transferred substance), ERMA approval code: Cleaning Products (Subsidiary Hazard) Group Standard 2006, HSR002530.			
<i>Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)</i>			
Key workplace requirements are:			
MSDS	To be available within 10 minutes in workplaces storing any quantity.		
Labelling	No removal of labels and/or decanting of product into other containers can occur.		
Emergency plan	Approved Evacuation Scheme required if > 1000kg is stored.		
Bunding and secondary containment	Required if > 1000kg is stored.		
Signage	Not required.		
Approved handler and tracking	Not required.		
Test certificate	Not required.		
<i>Other Legislation</i>			
In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.			

16. Other Information	
<i>Abbreviations</i>	
Approval Code	Approval HSR002530 Cleaning Products (Subsidiary Hazard) Group Standard 2006 Controls, ERMA. <a href="http://www.ermanz.govt.nz">www.ermanz.govt.nz</a>
CAS Number	Unique Chemical Abstracts Service Registry Number
Ceiling	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
Controls Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC50	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
ERMA	Environmental Risk Management Authority
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD50	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC50	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS	Material Safety Data Sheet (or Safety Data Sheet)
OSH	The Occupational Safety and Health Service of the Department of Labour (NZ)
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
<i>References</i>	
Data	Unless otherwise stated comes from the ERMA HSNO chemical classification information database (CCID) <a href="http://www.ermanz.govt.nz/hs/compliance/chemicals.html">http://www.ermanz.govt.nz/hs/compliance/chemicals.html</a> , for specific chemicals.
Approval Code	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)
Controls Matrix	Part of the ERMA New Zealand User Guide to the HSNO Control Regulations
WES 2002	The NZ Workplace Exposure Standards Effective from 2002, published by OSH and available on their web site – <a href="http://www.osh.dol.govt.nz">www.osh.dol.govt.nz</a> .
Other References	Ingredient's MSDSs, Chemidplus
<i>Disclaimer</i>	
<p>This MSDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The MSDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the MSDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications, are based on our experience, ERMA Guidelines and international classifications. This MSDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the MSDS author, email <a href="mailto:info@datachem.co.nz">info@datachem.co.nz</a> or phone: (09) 940 30 80.</p>	
